

# Projections and Planning Information

**UPDATES  
FOR  
LOS ANGELES COUNTY**

Replace Module D: Projections

**EMPLOYMENT DEVELOPMENT DEPARTMENT**

**LABOR MARKET INFORMATION DIVISION**

FOR QUESTIONS ABOUT THIS REPORT, CALL (916) 262-2162.



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Standard Industrial Classification Manual (SIC)

Standard Occupational Classification System (SOC)

North American Industry Classification System (NAICS)

Projection Methods and Economic Assumptions

Alphabetical Index of Occupations



# Introduction to Projections

## Using Projections Data

Projections contained in these tables provide information for estimating job opportunities, developing training programs, and gaining insight into employment trends. However, before reaching any final conclusions, users should consider the following:

*Remember that these data are estimates.* They were developed on the assumption that historical trends will continue into the future. However, events may occur during the seven-year projection period that are impossible to predict. Events such as military base closures, major business closures or openings, and natural disasters can have a major impact on employment levels.

*Do not use these projections as your sole source of information.* Use other more recent sources of local economic data to corroborate the projection data. This information may be found in documents such as those published by the EDD's Labor Market Information Division, local chambers of commerce or economic development agencies.

*Projections employment data are annual averages.* These averages may not accurately portray seasonal occupations or industries such as those found in agriculture, retail sales, recreation and construction.

*Employment levels stated reflect workers who are covered by the Unemployment Insurance program.* As a result, industries that are made up largely of individuals who are self-employed will be understated. Examples include industries such as real estate, hair salons and bookkeeping. Occupations such as dental hygienists and consultants will also show an understated level of employment.

## Industry Projections

Projections by industry forecast the anticipated changes within an industry over time. Forecasts are based on past employment trends and then are refined by a review of current economic developments.

Industry employment projections utilize employment data from both the Current Employment Statistics (CES) program and the Employment Payroll (ES202) program. There is a certain amount of error built into both systems. These errors may include employers classified in the wrong industry, incorrect employment levels reported by the employer and employment reported in the wrong county.

If a major industry category shows a decrease in future employment, it may be that only one or two industry components are experiencing the decline and other components are still expected to hire new workers. It is best to investigate all sectors of the industry. For example, retail trade has several components: building materials and garden supplies; general merchandise stores; food stores; automotive dealers and service stations; and apparel and accessory stores, to name a few.

Geographical differences account for differing employment opportunities. If an individual is considering relocating from one area of the state to another, the size of the industry and its expected growth level need to be kept in mind. Small rural counties will not have the same employment possibilities as do the larger metropolitan areas.

## Knowing Future Industry Trends

- helps economic development professionals foster compatible growth and promote an area's strengths.
- helps government agencies, non-profit agencies, researchers and other interested parties formulate plans and proposals.
- helps people seeking work and those doing counseling and/or job placement learn about employment opportunities in various industries.

## Occupational Projections

Projections by occupation estimate the changes in occupational employment over time resulting from industry growth. Changes in the number, size and type of employers within a geographical area will affect the demand for certain occupations. Also, technological advances or changes in laws or regulations may affect the occupational mix.

General changes in the work place affect some occupations. Jobs may be created, eliminated or consolidated due to restructuring or regulations affecting the requirements for the job. For example, personal computers and word processing programs eliminated many typist jobs, but created a need for word processors.

An occupational title does not give details about the occupation. An individual starting a career search may want to look at the various occupations in this module, choose any that are of interest and then do further research. There are other sources of information for

occupations and their specifics, such as skills and educational requirements, hourly earnings, benefits, working conditions and advancement opportunities.

Occupational staffing patterns used for the projections process are developed from the annual OES Survey of employers. The survey utilizes a sample of the entire universe of Unemployment Insurance (UI) covered employers. Because it is a survey, it is important that the following points be considered:

- There is inherent statistical error as a result of both the sampling process and the level of employer response to the survey mailings.
- OES staffing patterns may contain errors due to problems employers may have in completing the survey. These errors typically include: misunderstanding of survey instructions, misinterpretation of occupational definitions and/or titles contained on the forms, and clerical errors in filling out the forms.
- The employer's response to the survey may reflect conditions that are atypical. They may be experiencing a temporary shutdown, seasonal high or low employment, or a temporary increase in demand for their product or service.

Occupational projections data indicate major occupations and which occupations are likely to offer the greatest number of job opportunities. When possible, the user should focus on larger groups rather than specific occupations. Some occupations may not appear in published tables because of the low number of people employed in that area or because of confidentiality concerns.

Although an occupation may be stable and not expected to grow, this does not mean that there are no opportunities for employment. All occupations have turnover opportunities. Individuals change or leave jobs permanently for varying reasons. High turnover, especially in occupations requiring lower skill levels, would mean that there are frequent openings even though there is little or no growth.

Occupational projections data are prepared for employment and training planners, vocational educators, and others who need information on future employment by occupation. The outlook information can be used in making occupational training decisions and career choices. Employers considering expansion or relocation may find the data helpful in understanding the occupational composition and trends in California and its 58 counties.

#### **Additional Sources of Information**

Additional information on economic conditions in a particular area can be accessed through Labor Market Information Division consultants, who provide information about economic activities within the counties they serve, and EDD One Stop locations, where additional publications and information may be obtained. Other sources include:

- Wage And Salary Employment by Industry
- Occupational Outlook Handbook (BLS)
- California Occupational Guides
- California Association for Local Economic Development
- Chambers of Commerce
- Economic Development Organizations
- Newspapers
- Standard Industrial Classification Manual

#### **Automated Access**

Electronic access to current data is available through the EDD's Internet address at:

**[www.calmis.ca.gov](http://www.calmis.ca.gov)**

For information about the Web site or to order publications, please call (916) 262-2162.

# Description of Projection Tables

**Employment** includes nonagricultural wage and salary workers, except for self-employed persons, unpaid family workers, private household workers, and those involved in labor-management trade disputes. An **industry division** refers to a distinct group of private, public or nonprofit enterprises engaged in producing goods or providing services. With the exception of government, industries are classified by the Standard Industrial Classification (SIC) system. Industries are then grouped into ten major categories according to the economic activity involved:

*Agriculture, Forestry, and Fishing* includes establishments primarily engaged in agricultural production, forestry, commercial fishing, hunting and trapping, and related services.

*Mining* includes all establishments involved in the extraction of minerals, crude petroleum and natural gas, including quarrying, milling and related activities.

*Construction* includes establishments engaged in contract construction, including new work, additions, and repairs performed by general and special trade contractors.

*Manufacturing* includes establishments which are usually described as plants, factories or mills engaged in producing or processing nondurable or durable goods. These typically use power-driven machines and material-handling equipment.

*Transportation and Public Utilities* includes enterprises engaged in passenger and freight transportation by surface, water and air, warehousing and other transportation services. It also includes the communications complex of telephone, telegraph, radio and television; and the utilities providing gas, electric and sanitary services.

*Wholesale Trade* includes establishments involved in selling merchandise to industrial, commercial, farm, construction contractors and professional businesses; retailers; or other wholesalers.

*Retail Trade* includes establishments involved in the selling of merchandise for personal or household consumption and rendering services incidental to the sale of goods.

*Finance, Insurance, and Real Estate* includes banks, savings and loan institutions and security and commodity brokerages, insurance agencies and carriers, real estate

sales and management offices, and rental and planning agencies.

**Services** includes establishments such as hotels, laundries, auto repair shops, theaters, legal services, advertising services, private schools and hospitals, and nonprofit organizations which are engaged in rendering a variety of services to individuals and businesses.

**Government** includes legislative, judicial, administrative and regulatory activities of federal, state, local and international governments; and federal, state and local government hospitals and education. Note also, for the federal government sector, employment includes all civilian employees regardless of the activities in which they are engaged.

## Industry Tables

*Employment By Major Industry (Table 1)* This table shows 2001 estimated employment and 2008 projected employment along with the percentage of total employment for each major industry division.

*Employment By Industry (Table 2)* This table shows estimated employment for 2001 and projected employment by industry for 2008. The SIC code for each group is also listed. The "Employment Change" columns provide the projected change in employment between 2001 and 2008 and the percent change or growth rate over the seven-year period.

**Occupations** are classified on the basis of work performed and required skills, education, training, or credentials. Based on the Standard Occupational Classification (SOC) system, workers are classified at four levels of aggregation: major group; minor group; broad occupation; and detailed occupation. All occupations are clustered into one of the following 23 major occupation groups:

- *Management*
- *Business and Financial Operations*
- *Computer and Mathematical*
- *Architecture and Engineering*
- *Life, Physical, and Social Science*
- *Community and Social Services*
- *Legal*

- *Education, Training, and Library*
- *Arts, Design, Entertainment, Sports, and Media*
- *Healthcare Practitioners and Technical*
- *Healthcare Support*
- *Protective Service*
- *Food Preparation and Serving and Serving Related*
- *Building and Grounds Cleaning and Maintenance*
- *Personal Care and Service*
- *Sales and Related*
- *Office and Administrative Support*
- *Farming, Fishing, and Forestry*
- *Construction and Extraction*
- *Installation, Maintenance, and Repair*
- *Production*
- *Transportation and Material Moving Operations*
- *Military Specific Operations*

### **Occupational Tables**

*Employment by Occupational Group (Table 3)* This table shows 2001 and 2008 employment and projected employment for major occupational groups. The "Absolute Change" column gives the number of job opportunities resulting from the creation of new jobs. "Percent Change" shows the percentage change for each occupational group.

*Occupations with the Greatest Job Growth (Table 4)* This table lists the 50 occupations that are projected to register the largest numerical change between 2001 and 2008. In general, these occupations are numerically large. Some have average projected rates of growth, but because of their employment size will add significant numbers of new jobs over the 2001–2008 period.

*Occupations with the Fastest Job Growth (Table 5)* This table lists the 50 occupations with the greatest projected percentage increases, providing a different perspective to future occupational employment changes. Please note that some of these are increasing rapidly from relatively small employment levels and not necessarily found in Table 4.

*Occupational Employment Projections (Table 6)* This table provides occupational detail for up to 800 occupations. Annual average employment in each occupation is shown for 2001 and 2008. The column headed "Number" under

employment change presents the number of job opportunities resulting from the creation of new jobs. The "Percent" column shows the percentage change for each occupation. The next column, "Separations," shows job opportunities that are created by workers leaving the occupation.

Also included in this table is a codes column, showing the California SOC code for each occupational title. The Alphabetical Index of Occupations section may be used to locate occupations in the detailed table.

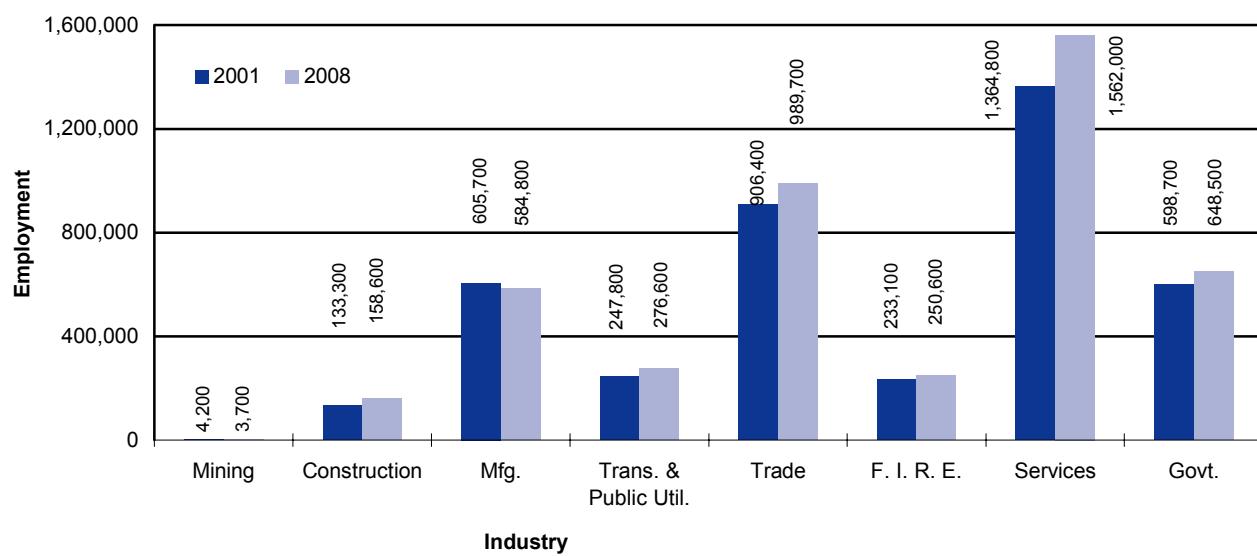
*Occupations With The Most Openings (Table 7)* This table lists the occupations projected to register the largest absolute growth and separations between 2001 and 2008.

*Occupations With Projected Job Loss (Table 8)* This table lists the occupations projected to decline over the 2001–2008 period. Declining employment is a sign that the occupation has no growth. However, turnover may result in some job opportunities.

**Table 1: Employment by Major Industry<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

Industry	2001 <sup>2</sup>	Percent of Total	2008	Percent of Total
<b>Total Nonfarm</b>	<b>4,093,900</b>	<b>100.0%</b>	<b>4,474,500</b>	<b>100.0%</b>
<b>Mining</b>	<b>4,200</b>	<b>0.1%</b>	<b>3,700</b>	<b>0.1%</b>
<b>Construction</b>	<b>133,300</b>	<b>3.3%</b>	<b>158,600</b>	<b>3.5%</b>
<b>Manufacturing</b>	<b>605,700</b>	<b>14.8%</b>	<b>584,800</b>	<b>13.1%</b>
<b>Transportation and Public Utilities</b>	<b>247,800</b>	<b>6.1%</b>	<b>276,600</b>	<b>6.2%</b>
<b>Trade</b>	<b>906,400</b>	<b>22.1%</b>	<b>989,700</b>	<b>22.1%</b>
<b>Finance, Insurance, and Real Estate</b>	<b>233,100</b>	<b>5.7%</b>	<b>250,600</b>	<b>5.6%</b>
<b>Services</b>	<b>1,364,800</b>	<b>33.3%</b>	<b>1,562,000</b>	<b>34.9%</b>
<b>Government</b>	<b>598,700</b>	<b>14.6%</b>	<b>648,500</b>	<b>14.5%</b>

**Employment by Major Industry  
2001–2008**



<sup>1</sup>Employment and projections contained in these tables are considered estimates (see introduction for a full explanation of data limitations). Employment is reported by place of work and excludes self-employed persons, unpaid family workers, domestics, volunteers, and those involved in labor-management trade disputes. These data are based on 1987 Standard Industrial Classifications. Annual average industry detail may not add up to totals due to independent rounding. Government data include all civilian government employees regardless of the activities in which they are engaged.

<sup>2</sup>March 2001 benchmark.

**Table 2: Industry Employment Projections<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

Industry	SIC	Annual Average Employment		Employment Change	
		2001 <sup>2</sup>	2008	Number	Percent
<b>TOTAL NONFARM</b>	<b>074, 075, 078, 10-99 except 88</b>	<b>4,093,900</b>	<b>4,474,500</b>	<b>380,600</b>	<b>9.3</b>
<b>GOODS PRODUCING</b>	<b>10-39</b>	<b>743,200</b>	<b>747,100</b>	<b>3,900</b>	<b>0.5</b>
<b>MINING</b>	<b>10-14</b>	<b>4,200</b>	<b>3,700</b>	<b>-500</b>	<b>-11.9</b>
Oil & Gas Extraction	13	3,500	3,000	-500	-14.3
Other Mining		800	700	-100	-12.5
<b>CONSTRUCTION</b>	<b>15-17</b>	<b>133,300</b>	<b>158,600</b>	<b>25,300</b>	<b>19.0</b>
General Building Contractors	15	29,300	37,400	8,100	27.6
Heavy Construction	16	10,200	11,400	1,200	11.8
Special Trade	17	93,800	109,800	16,000	17.1
<b>MANUFACTURING</b>	<b>20-39</b>	<b>605,700</b>	<b>584,800</b>	<b>-20,900</b>	<b>-3.5</b>
Durable Goods	24, 25, 32-39	331,500	318,500	-13,000	-3.9
Lumber & Wood Products	24	11,700	11,900	200	1.7
Millwork, Plywood	243	7,300	7,000	-300	-4.1
Other Lumber & Wood Products	24X	4,400	4,900	500	11.4
Furniture & Fixtures	25	26,800	27,300	500	1.9
Household Furniture	251	17,700	18,000	300	1.7
Other Furniture	25X	9,100	9,300	200	2.2
Stone, Clay, & Glass	32	12,400	12,200	-200	-1.6
Pottery & Related	326	1,100	800	-300	-27.3
Concrete, Gypsum, & Plaster	327	3,900	4,400	500	12.8
Other Stone, Clay, & Glass	32X	7,400	7,000	-400	-5.4
Primary Metals	33	14,600	13,600	-1,000	-6.8
Iron & Steel Foundries	332	2,900	2,400	-500	-17.2
Nonferrous Rolling & Drawing	335	3,400	3,400	0	0.0
Nonferrous Castings	336	3,500	3,000	-500	-14.3
Other Primary Metals	33X	4,800	4,800	0	0.0
Fabricated Metal Products	34	47,200	46,700	-500	-1.1
Cutlery & Handtools	342	3,800	3,400	-400	-10.5
Fabricated Structural Metal	344	11,000	11,500	500	4.5
Screw Machine Prod., Bolts	345	6,800	6,300	-500	-7.4
Metal forgings & Stampings	346	3,900	3,400	-500	-12.8
Metal Services, NEC	347	10,000	10,600	600	6.0
Other Fabricated Metal Products	34X	11,800	11,500	-300	-2.5
Industrial Machinery	35	44,400	42,200	-2,200	-5.0
Construction & Related Machinery	353	3,000	3,100	100	3.3
Metalworking Machinery	354	7,200	6,800	-400	-5.6
General Industrial Machinery	356	4,500	4,000	-500	-11.1
Computer & Office Equipment	357	6,300	5,400	-900	-14.3
Other Industrial Machinery	35X	23,400	22,900	-500	-2.1

**Table 2: Industry Employment Projections<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

Industry	SIC	Annual Average Employment		Employment Change	
		2001 <sup>2</sup>	2008	Number	Percent
Electronic Equipment	36	41,200	36,600	-4,600	-11.2
Electric Industrial Apparatus	362	2,100	1,600	-500	-23.8
Household Appliances	363	800	600	-200	-25.0
Lighting & Wiring Equipment	364	8,900	8,900	0	0.0
Household Audio & Video	365	5,000	4,000	-1,000	-20.0
Communication Equipment	366	4,600	5,200	600	13.0
Electrical Components	367	14,500	12,000	-2,500	-17.2
Other Electronic Equipment	36X	5,300	4,300	-1,000	-18.9
Transportation Equipment	37	64,300	59,200	-5,100	-7.9
Motor Vehicles & Equipment	371	11,700	10,700	-1,000	-8.5
Aircraft & Parts	372	47,800	42,800	-5,000	-10.5
Ship & Boat Building/Repair	373	1,100	1,200	100	9.1
Missiles, Spacecraft & Part	376	1,600	1,900	300	18.8
Other Transportation Equipment	37X	2,100	2,600	500	23.8
Instruments & Related Products	38	50,900	50,300	-600	-1.2
Search & Navigation Equipment	381	30,900	29,200	-1,700	-5.5
Measuring & Control Devices	382	7,500	6,900	-600	-8.0
Other Instruments & Related	38X	12,500	14,200	1,700	13.6
Miscellaneous Manufacturing	39	17,900	18,500	600	3.4
Toys & Sporting Goods	394	4,500	4,400	-100	-2.2
Other Misc. Manufacturing	39X	13,500	14,100	600	4.4
Nondurable Goods	20-23, 26-31	274,200	266,300	-7,900	-2.9
Food & Kindred Products	20	46,100	47,800	1,700	3.7
Meat Products	201	4,300	4,800	500	11.6
Dairy Products	202	5,600	6,100	500	8.9
Preserved Fruits & Vegetables	203	6,300	6,800	500	7.9
Bakery Products	205	8,900	9,500	600	6.7
Beverages	208	6,100	6,700	600	9.8
Canned, Cured & Frozen Seafood	20, 912, 092	1,700	1,200	-500	-29.4
Other Food & Kindred Products	20X	13,200	12,700	-500	-3.8
Textile Mill Products	22	15,800	16,600	800	5.1
Apparel & Other Textile Products	23	91,400	85,300	-6,100	-6.7
Men's/Boy's Suits/Coats/Furnishings	231, 232	4,400	4,000	-400	-9.1
Wmn's/Childs Outer/Underwear	233, 234, 236	68,400	62,100	-6,300	-9.2
Other Apparel & Textile Products	23X	18,600	19,200	600	3.2
Paper & Allied Products	26	15,200	14,400	-800	-5.3
Pulp, Paper, Paperboard Mil	261, 262, 263	1,400	1,300	-100	-7.1
Paperboard Containers/Boxes	265	6,600	6,100	-500	-7.6
Misc. Converted Paper Products	267	7,300	7,000	-300	-4.1
Printing & Publishing	27	47,200	45,900	-1,300	-2.8
Newspapers	271	11,600	10,300	-1,300	-11.2
Commercial Printing	275	20,800	21,600	800	3.8
Other Printing & Publishing	27X	14,700	14,000	-700	-4.8
Chemicals & Allied Products	28	24,900	27,000	2,100	8.4
Drugs	283	7,200	8,800	1,600	22.2
Soap, Cleaners, Toilet Good	284	8,500	9,300	800	9.4
Paints & Allied Products	285	2,000	1,700	-300	-15.0
Other Chem. & Allied Products	28X	7,200	7,200	0	0.0

**Table 2: Industry Employment Projections<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

Industry	SIC	Annual Average Employment		Employment Change	
		2001 <sup>2</sup>	2008	Number	Percent
Petroleum & Coal Products	29	6,300	5,000	-1,300	-20.6
Petro Refining	291	5,100	3,900	-1,200	-23.5
Other Petroleum & Coal Products	29X	1,200	1,100	-100	-8.3
Rubber & Misc. Plastics Products	30	24,200	21,400	-2,800	-11.6
Fabr Rubber Products	306	2,500	2,200	-300	-12.0
Misc. Plastics Products	308	19,900	17,400	-2,500	-12.6
Other Rubber & Plastics Products	30X	1,800	1,800	0	0.0
Leather & Leather Products	31	3,200	2,900	-300	-9.4
<b>SERVICE PRODUCING</b>	<b>074, 075, 078, 40-99 except 88</b>	<b>3,350,600</b>	<b>3,727,400</b>	<b>376,800</b>	<b>11.2</b>
<b>TRANSPORTATION &amp; PUBLIC UTILITIES</b>	<b>40-42, 44-49</b>	<b>247,800</b>	<b>276,600</b>	<b>28,800</b>	<b>11.6</b>
Transportation	40-42, 44-47	172,300	194,600	22,300	12.9
Trucking & Warehousing	42	53,800	59,800	6,000	11.2
Water Transportation	44	15,100	19,100	4,000	26.5
Air Transportation	45	56,500	61,500	5,000	8.8
Other Transportation		46,900	54,200	7,300	15.6
Communications & Public Utilities	48, 49	75,500	82,000	6,500	8.6
Communications	48	57,400	64,400	7,000	12.2
Electric, Gas & Sanitary Services	49	18,100	17,600	-500	-2.8
<b>TRADE</b>	<b>50-59</b>	<b>906,400</b>	<b>989,700</b>	<b>83,300</b>	<b>9.2</b>
Wholesale Trade	50, 51	264,300	282,700	18,400	7.0
Wholesale--Durable	50	146,800	153,300	6,500	4.4
Wholesale--Non durable	51	117,600	129,400	11,800	10.0
Retail Trade	52-59	642,000	707,000	65,000	10.1
Bldng Materials & Garden Supplies	52	21,100	26,200	5,100	24.2
General Merchandise	53	60,100	64,100	4,000	6.7
Food Stores	54	86,700	91,700	5,000	5.8
Automotive Dealers & Service	55	58,600	63,100	4,500	7.7
Apparel & Accessory Stores	56	40,400	45,000	4,600	11.4
Eating & Drinking Places	58	246,500	274,700	28,200	11.4
Other Retail Trade		128,500	142,200	13,700	10.7
<b>FINANCE, INSURANCE &amp; REAL ESTATE</b>	<b>60-65, 67</b>	<b>233,100</b>	<b>250,600</b>	<b>17,500</b>	<b>7.5</b>
Finance	60-62, 67	114,300	122,300	8,000	7.0
Depository Institutions	60	60,900	62,100	1,200	2.0
Nondepository Institutions	61	20,600	23,900	3,300	16.0
Security & Commodity Brokers	62	22,000	24,500	2,500	11.4
Holding & Investment	67	10,800	11,800	1,000	9.3
Insurance	63, 64	62,800	65,800	3,000	4.8
Real Estate	65	56,000	62,500	6,500	11.6

**Table 2: Industry Employment Projections<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

Industry	SIC	Annual Average Employment		Employment Change	
		2001 <sup>2</sup>	2008	Number	Percent
<b>SERVICES</b>	<b>074, 075, 078, 70-89 except 88</b>	<b>1,364,800</b>	<b>1,562,000</b>	<b>197,200</b>	<b>14.4</b>
Hotels & Other Lodging Places	70	40,900	44,900	4,000	9.8
Personal Services	72	39,000	43,200	4,200	10.8
Business Services	73	335,100	430,100	95,000	28.3
Motion Services	78	144,900	153,500	8,600	5.9
Movie Production	781	130,500	137,700	7,200	5.5
Other Motion Pictures	78X	14,400	15,800	1,400	9.7
Amusement & Recreation Services	79	56,400	64,700	8,300	14.7
Health Services	80	277,000	302,000	25,000	9.0
Private Educational Services	82	86,600	101,100	14,500	16.7
Engineering & Management	87	122,900	138,400	15,500	12.6
Other Services		262,000	284,100	22,100	8.4
<b>GOVERNMENT</b>		<b>598,700</b>	<b>648,500</b>	<b>49,800</b>	<b>8.3</b>
Federal Government		54,200	53,200	-1,000	-1.8
Department of Defense		3,700	3,700	0	0.0
Other Federal Government		50,500	49,500	-1,000	-2.0
State & Local Government		544,500	595,300	50,800	9.3
State Government		79,500	83,400	3,900	4.9
State Education		47,500	50,500	3,000	6.3
Other State Government		32,000	32,900	900	2.8
Local Government		465,000	511,900	46,900	10.1
Local Education		260,900	294,500	33,600	12.9
Local Noneducation		204,100	217,400	13,300	6.5

<sup>1</sup>Employment and projections contained in these tables are considered estimates (see introduction for a full explanation of data limitations). Employment is reported by place of work and excludes self-employed persons, unpaid family workers, domestics, volunteers, and those involved in labor-management trade disputes. These data are based on 1987 Standard Industrial Classifications. Annual average industry detail may not add up to totals due to independent rounding. Government data include all civilian government employees regardless of the activities in which they are engaged.

<sup>2</sup>March 2001 benchmark.

# Occupational Trends and Outlook

Job growth or decline is influenced by the overall level of economic activity in a given area; that is, when economic activity refers to the overall economic growth or decline of industries and/or changes in occupation distributions within individual industries. Each area's economic climate influences the growth or decline of occupations that account for a large number of jobs within that area. In contrast, occupations with a small number of workers grow or decline as a result of the growth or decline of their specific industries.

This section provides a discussion of major trends for occupation categories shown in **Table 6: Occupational Employment Projections** (beginning on page D-18). Projected changes in the level of employment in each occupation are an estimate of new job openings expected over a seven-year period. Separations, an estimate of the number of people leaving the workforce or an occupation, accounts for additional job openings. These estimates do not include job openings that are a result of people who change jobs but stay in the same occupation.

## Los Angeles County

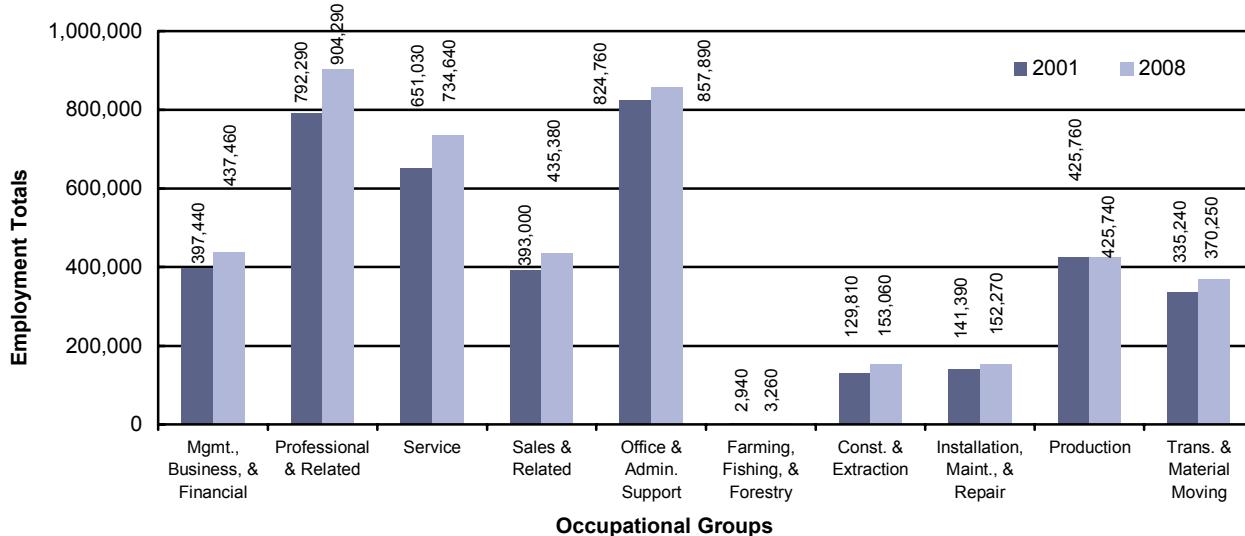
In 2001, Los Angeles County had a total of 4,093,900 workers employed in all industries. Employment projections estimate that number will reach 4,474,500 by 2008. This represents an annual growth rate of 1.3 percent, less than the 2.2 percent growth rate predicted for California as a whole. Separations will add another 715,460 job openings.

*Office and administrative support occupations* was Los Angeles County's largest occupational group in 2001. Office and administrative support occupations employed 824,760 persons in 2001 and is projected to grow to 857,890 jobs by 2008, an increase of 4 percent or 33,130 new jobs. *Professional and related occupations* was the second-largest occupational group, with employment of 792,290 in 2001. This group is expected to add the most new jobs (112,000) to reach 904,290 by 2008, 14.1 percent growth above the 2001 employment level. The third-largest group is *service occupations* with 2001 employment of 651,030 and expected growth of 12.8 percent or 83,610 jobs to a 2008 total of 734,640.

*Construction and extraction occupations* is projected to be the fastest growing occupational group, with an estimated growth rate of 17.9 percent followed by *professional and related occupations* with an estimated 14.1 percent growth rate.

In Los Angeles County, the occupation with the greatest growth is *retail salespersons*, projected to grow by 13,940 jobs during the seven-year projection period (see **Table 4: Occupations with the Greatest Job Growth**). These jobs are found mostly in department stores; miscellaneous shopping goods stores; family clothing stores; new and used car dealers; and lumber and other building material stores (see **Table 2: Industry Employment Projections**). *Security guards* follow with growth of 11,690 jobs, primarily

**Major Occupational Category Growth  
2001–2008**



# Occupational Trends and Outlook

in miscellaneous business services; elementary and secondary schools; department stores; motion picture production and services; and hotels and motels. *Cashiers* is third, growing by 11,210 jobs, and mostly employed in grocery stores; drug stores and proprietary stores; gasoline service stations; and department stores. *Teacher assistants* will add an estimated 10,160 jobs, largely located in elementary and secondary schools; child day care services; religious organizations; and colleges and universities. *Janitors and cleaners (except maids and housekeeping cleaners)* will add 9,670 jobs and can be found in services to buildings; elementary and secondary schools; local government (except hospitals and education); religious organizations; and personnel supply services.

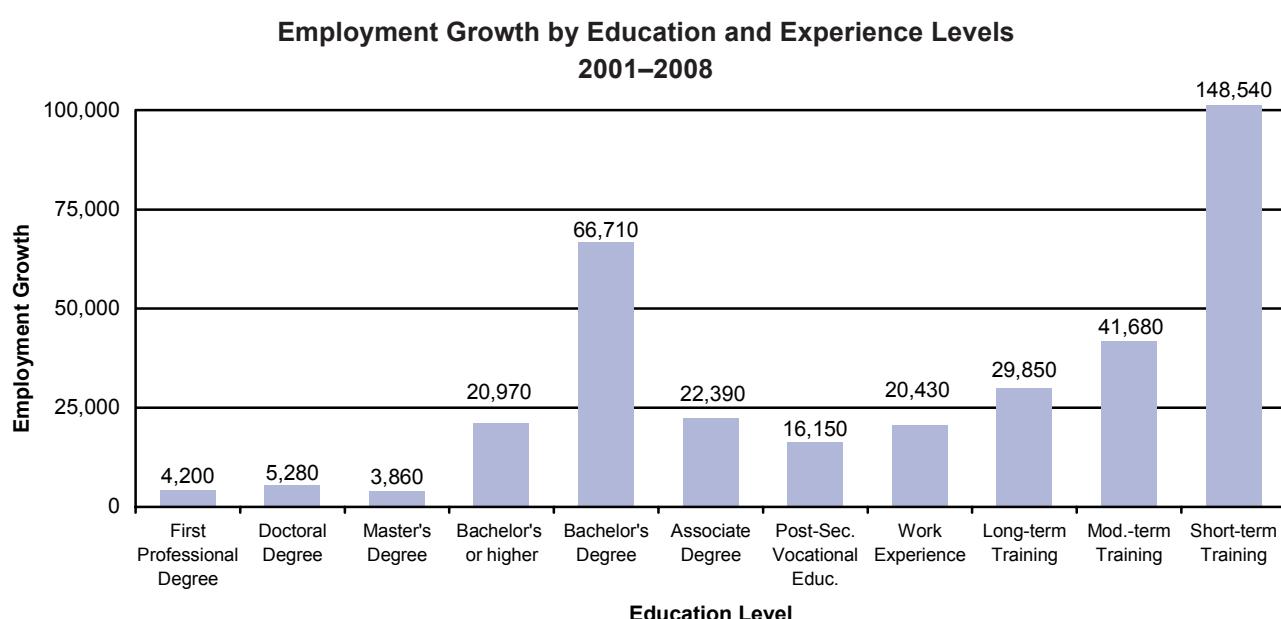
The fastest growing occupation during the seven-year projection period in Los Angeles County will be *computer support specialists*, with a growth rate of 53.4 percent (see **Table 5: Occupations with the Fastest Job Growth**), primarily in computer and data processing services; management and public relations; personnel supply services; professional and commercial equipment; and elementary and secondary schools. The second-fastest growing occupation is *network and computer systems administrators*, gaining 46 percent, and largely employed in computer and data processing services; management and public relations; motion picture production and services; colleges and universities; and telephone communications. *Computer software engineers (applications)* is projected

to increase 42.6 percent by 2008. These jobs exist primarily in computer and data processing services; search and navigation equipment; computer and office equipment; motion picture production and services; and engineering and architectural services. Next is *computer software engineers (systems software)*, increasing by 40.7 percent, and working in computer and data processing services; search and navigation equipment; telephone communications; computer and office equipment; and aircraft and parts. *Desktop publishers* will increase 38.9 percent by 2008 and are employed predominately in printing trade services; commercial printing, newspapers, books; and management and public relations companies.

## Training

The greatest number of new jobs in Los Angeles County, 148,540 or 39 percent, will require **short-term on-the-job training**. The next greatest number of new jobs, 17.5 percent or 66,710 jobs, will require the employee to have a **bachelor's degree**. Some 11 percent, or 41,680, of the new jobs will require **moderate-term on-the-job training**. An estimated 29,850, or 7.8 percent, of the new jobs will require **long-term on-the-job training**.

The chart below displays the number of new jobs by education and experience levels. For more detailed descriptions of training levels, refer to the definitions on the following page.



# Training Level Definitions

Occupational training and education classifications were developed by the Bureau of Labor Statistics to improve on prior classification systems that did not distinguish between occupations with comparable educational requirements. For example, neither carpenters nor laborers require formal education beyond high school, but the complexity of the work and the training time required results in carpenters being placed in the long-term on-the-job training category and laborers placed in the short-term on-the-job training category. Of course there is more than one way to qualify for a job. In this classification system, the education and training required reflects the manner in which most workers become proficient in that occupation and the preferences of most employers.

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## **First professional degree (1)**

Occupations that require at least two years of full-time academic study beyond a bachelor's degree (for example, law, medicine, dentistry and clergy).

## **Doctoral degree (2)**

Occupations that require at least three years of full-time academic study beyond a bachelor's degree, culminating in a doctoral degree.

## **Master's degree (3)**

Occupations that require the completion of a master's degree program, which is usually one to two years beyond a bachelor's degree.

## **Bachelor's or higher, some work experience (4)**

Occupations that generally require work experience in an occupation requiring a bachelor's or higher degree. Most occupations in this category are managerial occupations that require work experience in a related non-managerial occupation.

## **Bachelor's degree (5)**

Occupations that require the completion of at least 4, but not more than 5 years, of full-time academic study beyond high school resulting in a Bachelor's degree.

## **Associate degree (6)**

Occupations that require the completion of at least 2 years of full-time academic study beyond high school.

## **Post-secondary vocational education (7)**

Occupations that require completion of vocational school training.

## **Work experience (8)**

Occupations that require skills obtained through work experience in a related occupation.

## **Long-term on-the-job training (9)**

Occupations that require more than 12 months of on-the-job training or combined work experience and formal classroom instruction for workers to develop the skills needed for average job performance.

## **Moderate-term on-the-job training (10)**

Occupations in which workers can develop average job performance after 1 to 12 months of combined on-the-job experience and informal training.

## **Short-term on-the-job training (11)**

Occupations in which workers can develop skills needed after a short demonstration or up to one month of on-the-job experience and instruction.

**Table 3: Employment by Occupation Group**  
**2001 – 2008**  
**Los Angeles County**

Occupational Group	2001 <sup>1</sup>	Percent of Total	2008	Percent of Total	Absolute Change	Percent Change
Total, All Occupations	4,093,900	100.0%	4,474,500	100.0%	380,600	9.3%
Management, Business, and Financial	397,440	9.7%	437,460	9.8%	40,020	10.1%
Professional and Related	792,290	19.4%	904,290	20.2%	112,000	14.1%
Service	651,030	15.9%	734,640	16.4%	83,610	12.8%
Sales and Related	393,000	9.6%	435,380	9.7%	42,380	10.8%
Office and Administrative Support	824,760	20.1%	857,890	19.2%	33,130	4.0%
Farming, Fishing, and Forestry	2,940	0.1%	3,260	0.1%	320	10.9%
Construction and Extraction	129,810	3.2%	153,060	3.4%	23,250	17.9%
Installation, Maintenance, and Repair	141,390	3.5%	152,270	3.4%	10,880	7.7%
Production	425,760	10.4%	425,740	9.5%	-20	0.0%
Transportation and Material Moving	335,240	8.2%	370,250	8.3%	35,010	10.4%

<sup>1</sup>Total is based on the March 2001 Benchmark.

**Table 4: Occupations with the Greatest Job Growth<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Number	Percent	BLS Training Level	Education/Experience
		2001 <sup>2</sup>	2008				
41-2031	Retail Salespersons	108,710	122,650	13,940	12.8	11	Short-Term On-The-Job-Training
33-9032	Security Guards	51,720	63,410	11,690	22.6	11	Short-Term On-The-Job-Training
41-2011	Cashiers	92,410	103,620	11,210	12.1	11	Short-Term On-The-Job-Training
25-9041	Teacher Assistants	54,480	64,640	10,160	18.6	11	Short-Term On-The-Job-Training
37-2011	Janitors & Clean, Ex Maids & Housekeep Cleaners	62,350	72,020	9,670	15.5	11	Short-Term On-The-Job-Training
43-4051	Customer Service Representatives	55,070	64,570	9,500	17.3	10	Moderate-Term On-The-Job-Training
35-3021	Comb Food Prep & Serving Wrks, Incl Fast Food	47,160	55,720	8,560	18.2	11	Short-Term On-The-Job-Training
43-9061	Office Clerks, General	107,130	115,590	8,460	7.9	11	Short-Term On-The-Job-Training
29-1111	Registered Nurses	65,450	73,600	8,150	12.5	6	Associate Degree
35-3031	Waiters & Waitresses	60,260	68,240	7,980	13.2	11	Short-Term On-The-Job-Training
15-1041	Computer Support Specialists	13,830	21,220	7,390	53.4	6	Associate Degree
53-7062	Laborers & Freight, Stock, & Material Movers,	77,780	85,150	7,370	9.5	11	Short-Term On-The-Job-Training
25-2021	Elementary School Teachers, Except Special Educ.	50,140	56,710	6,570	13.1	5	Bachelor's Degree
11-1021	General & Operations Managers	68,340	74,140	5,800	8.5	4	Bachelor's or Higher and Some Work Exp.
15-1031	Computer Software Engineers, Applications	11,960	17,050	5,090	42.6	5	Bachelor's Degree
25-2031	Secondary School Teachers, Ex Special & Voc Educ.	29,340	34,320	4,980	17.0	5	Bachelor's Degree
35-2014	Cooks, Restaurant	29,980	34,830	4,850	16.2	9	Long-Term On-The-Job-Training
53-3033	Truck Drivers, Light or Delivery Services	37,620	42,420	4,800	12.8	11	Short-Term On-The-Job-Training
53-7064	Packers & Packagers, Hand	43,780	48,520	4,740	10.8	11	Short-Term On-The-Job-Training
53-3032	Truck Drivers, Heavy & Tractor-Trailer	28,750	33,320	4,570	15.9	10	Moderate-Term On-The-Job-Training
15-1071	Network & Computer Systems Administrators	9,910	14,470	4,560	46.0	5	Bachelor's Degree
41-1011	First-Line Sups/Mgrs of Retail Sales Workers	35,020	39,290	4,270	12.2	8	Work Experience
43-6011	Executive Secretaries & Administrative Assistants	62,870	67,000	4,130	6.6	10	Moderate-Term On-The-Job-Training
37-2012	Maids & Housekeeping Cleaners	22,730	26,520	3,790	16.7	11	Short-Term On-The-Job-Training
31-0102	Nursing Aides, Orderlies, & Attendants	30,190	33,390	3,200	10.6	11	Short-Term On-The-Job-Training
43-4171	Receptionists & Information Clerks	30,030	33,210	3,180	10.6	11	Short-Term On-The-Job-Training
47-2031	Carpenters	16,840	19,950	3,110	18.5	9	Long-Term On-The-Job-Training
15-1032	Computer Software Engineers, Systems Software	7,200	10,130	2,930	40.7	5	Bachelor's Degree
43-5081	Stock Clerks & Order Fillers	55,700	58,550	2,850	5.1	11	Short-Term On-The-Job-Training
47-2111	Electricians	13,570	16,420	2,850	21.0	9	Long-Term On-The-Job-Training

**Table 4: Occupations with the Greatest Job Growth<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change		BLS Training Level	Education/Experience
		2001 <sup>2</sup>	2008	Number	Percent		
33-3051	Police & Sheriff's Patrol Officers	17,340	20,180	2,840	16.4	9	Long-Term On-The-Job-Training
47-2061	Construction Laborers	12,790	15,570	2,780	21.7	10	Moderate-Term On-The-Job-Training
31-9092	Medical Assistants	13,270	15,950	2,680	20.2	10	Moderate-Term On-The-Job-Training
37-3011	Landscaping & Groundskeeping Workers	18,630	21,190	2,560	13.7	11	Short-Term On-The-Job-Training
13-2011	Accountants & Auditors	25,910	28,330	2,420	9.3	5	Bachelor's Degree
11-3031	Financial Managers	17,770	20,180	2,410	13.6	4	Bachelor's or Higher and Some Work Exp.
15-1051	Computer Systems Analysts	9,670	12,070	2,400	24.8	5	Bachelor's Degree
49-3023	Automotive Service Technicians & Mechanics	21,930	24,250	2,320	10.6	7	Post-Secondary Vocational Education
11-2022	Sales Managers	10,890	13,150	2,260	20.8	4	Bachelor's or Higher and Some Work Exp.
23-1011	Lawyers	19,310	21,550	2,240	11.6	1	First Professional Degree
41-2021	Counter & Rental Clerks	16,150	18,380	2,230	13.8	11	Short-Term On-The-Job-Training
35-2021	Food Preparation Workers	20,460	22,680	2,220	10.9	11	Short-Term On-The-Job-Training
11-9051	Food Service Managers	14,710	16,860	2,150	14.6	8	Work Experience
25-2041	Special Ed Teachers, Preschool, Kindergarten, & Elem School	7,450	9,590	2,140	28.7	5	Bachelor's Degree
11-3021	Computer & Information Systems Managers	7,050	8,950	1,900	27.0	4	Bachelor's or Higher and Some Work Exp.
31-9091	Dental Assistants	11,570	13,460	1,890	16.3	10	Moderate-Term On-The-Job-Training
43-1011	First-Line Sups/Mgrs of Office & Admin Support	50,490	52,370	1,880	3.7	8	Work Experience
43-3011	Bill & Account Collectors	12,290	14,080	1,790	14.6	11	Short-Term On-The-Job-Training
47-2051	Cement Masons & Concrete Finishers	8,610	10,370	1,760	20.4	9	Long-Term On-The-Job-Training
35-1012	First-Line Sups/Mgrs of Food Prep & Serving Wrkrs	21,370	23,080	1,710	8.0	8	Work Experience
<b>TOTAL OF THESE OCCUPATIONS</b>		<b>1,717,980</b>	<b>1,952,910</b>	<b>234,930</b>	<b>13.7</b>		

<sup>1</sup>Excludes All Other categories.

<sup>2</sup>March 2001 Benchmark.

**Table 5: Occupations with the Fastest Job Growth<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment 2001 <sup>2</sup>		Employment Change 2008		BLS Training Level	Education/Experience
		Number	Percent	Number	Percent		
15-1041	Computer Support Specialists	13,830	21,220	7,390	53.4	6	Associate Degree
15-1071	Network & Computer Systems Administrators	9,910	14,470	4,560	46.0	5	Bachelor's Degree
15-1031	Computer Software Engineers, Applications	11,960	17,050	5,090	42.6	5	Bachelor's Degree
15-1032	Computer Software Engineers, Systems Software	7,200	10,130	2,930	40.7	5	Bachelor's Degree
43-9031	Desktop Publishers	1,080	1,500	420	38.9	7	Post-Secondary Vocational Education
15-1081	Network Systems & Data Communications Analysts	2,920	4,040	1,120	38.4	5	Bachelor's Degree
37-2021	Pest Control Workers	4,020	5,490	1,470	36.6	10	Moderate-Term On-The-Job-Training
53-4011	Locomotive Engineers	1,020	1,380	360	35.3	8	Work Experience
49-2098	Security & Fire Alarm Systems Installers	4,680	6,230	1,550	33.1	7	Post-Secondary Vocational Education
15-1061	Database Administrators	2,880	3,760	880	30.6	5	Bachelor's Degree
33-9021	Private Detectives & Investigators	1,230	1,590	360	29.3	8	Work Experience
25-2041	Special Ed Teachers, Preschool, Kindergarten, & Elem Sch.	7,450	9,590	2,140	28.7	5	Bachelor's Degree
21-1093	Social & Human Service Assistants	5,170	6,570	1,400	27.1	10	Moderate-Term On-The-Job-Training
11-3021	Computer & Information Systems Managers	7,050	8,950	1,900	27.0	4	Bachelor's or Higher and Some Work Exp.
47-2021	Brickmasons & Blockmasons	1,120	1,410	290	25.9	9	Long-Term On-The-Job-Training
53-5031	Ship Engineers	510	640	130	25.5	7	Post-Secondary Vocational Education
27-1011	Art Directors	910	1,140	230	25.3	4	Bachelor's or Higher and Some Work Exp.
15-1051	Computer Systems Analysts	9,670	12,070	2,400	24.8	5	Bachelor's Degree
43-4081	Hotel, Motel, & Resort Desk Clerks	3,650	4,500	850	23.3	11	Short-Term On-The-Job-Training
13-2052	Personal Financial Advisors	3,120	3,840	720	23.1	5	Bachelor's Degree
23-2011	Paralegals & Legal Assistants	5,270	6,480	1,210	23.0	6	Associate Degree
29-2054	Respiratory Therapy Technicians	700	860	160	22.9	7	Post-Secondary Vocational Education
29-1126	Respiratory Therapists	2,110	2,590	480	22.7	6	Associate Degree
33-9032	Security Guards	51,720	63,410	11,690	22.6	11	Short-Term On-The-Job-Training
29-2052	Pharmacy Technicians	4,660	5,700	1,040	22.3	10	Moderate-Term On-The-Job-Training
29-1127	Speech-Language Pathologists	1,030	1,260	230	22.3	3	Master's Degree
29-2071	Medical Records & Health Information Technicians	3,960	4,840	880	22.2	6	Associate Degree
27-1014	Multi-Media Artists & Animators	2,900	3,540	640	22.1	5	Bachelor's Degree
53-7121	Tank Car, Truck, & Ship Loaders	1,680	2,050	370	22.0	10	Moderate-Term On-The-Job-Training
47-2061	Construction Laborers	12,790	15,570	2,780	21.7	10	Moderate-Term On-The-Job-Training

**Table 5: Occupations with the Fastest Job Growth<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Number	Percent	BLS Training Level	Education/Experience
		2001 <sup>2</sup>	2008				
47-2043	Floor Sanders & Finishers	460	560	100	21.7	10	Moderate-Term On-The-Job-Training
47-2081	Drywall & Ceiling Tile Installers	5,780	7,030	1,250	21.6	10	Moderate-Term On-The-Job-Training
53-7021	Crane & Tower Operators	1,350	1,640	290	21.5	10	Moderate-Term On-The-Job-Training
25-1122	Communications Teachers, Postsecondary	560	680	120	21.4	2	Doctoral Degree
25-1022	Mathematical Science Teachers, Postsecondary	420	510	90	21.4	2	Doctoral Degree
25-1194	Vocational Education Teachers, Postsecondary	3,890	4,710	820	21.1	8	Work Experience
47-2111	Electricians	13,570	16,420	2,850	21.0	9	Long-Term On-The-Job-Training
25-2043	Special Education Teachers, Secondary School	2,820	3,410	590	20.9	5	Bachelor's Degree
39-4021	Funeral Attendants	430	520	90	20.9	11	Short-Term On-The-Job-Training
11-2022	Sales Managers	10,890	13,150	2,260	20.8	4	Bachelor's or Higher and Some Work Exp.
25-1191	Graduate Teaching Assistants	3,940	4,760	820	20.8	5	Bachelor's Degree
27-1022	Fashion Designers	1,730	2,090	360	20.8	5	Bachelor's Degree
39-6032	Trans Attendants, Ex Flight Attendants & Bag Porters	920	1,110	190	20.7	11	Short-Term On-The-Job-Training
11-2031	Public Relations Managers	1,550	1,870	320	20.6	4	Bachelor's or Higher and Some Work Exp.
27-1024	Graphic Designers	5,810	7,000	1,190	20.5	5	Bachelor's Degree
47-2051	Cement Masons & Concrete Finishers	8,610	10,370	1,760	20.4	9	Long-Term On-The-Job-Training
27-1026	Merchandise Displayers & Window Trimmers	2,060	2,480	420	20.4	10	Moderate-Term On-The-Job-Training
25-2042	Special Education Teachers, Middle School	930	1,120	190	20.4	5	Bachelor's Degree
25-1123	English Lang & Literature Teachers, Postsecondary	740	890	150	20.3	2	Doctoral Degree
31-9092	Medical Assistants	13,270	15,950	2,680	20.2	10	Moderate-Term On-The-Job-Training
<b>TOTAL OF THESE OCCUPATIONS</b>		<b>265,930</b>	<b>338,140</b>	<b>72,210</b>	<b>27.2</b>		

<sup>1</sup>Excludes All Other categories and occupations of less than 400 in the year 2001.

<sup>2</sup>March 2001 Benchmark.

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Percent		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
00-0000	Total, All Occupations	4,093,900	4,474,500	380,600	9.3	715,460		
11-13-0000	Management, Business, & Financial Occupations	397,440	437,460	40,020	10.1	52,660		
11-0000	Management Occupations	229,500	253,900	24,400	10.6	28,460		
11-1011	Chief Executives	13,840	15,100	1,260	9.1	3,150	4	Bachelor's or Higher and Some Work Exp.
11-1021	General & Operations Managers	68,340	74,140	5,800	8.5	8,220	4	Bachelor's or Higher and Some Work Exp.
11-1031	Legislators	390	420	30	7.7	90	4	Bachelor's or Higher and Some Work Exp.
11-2011	Advertising & Promotions Managers	3,140	3,760	620	19.7	340	4	Bachelor's or Higher and Some Work Exp.
11-2021	Marketing Managers	6,930	7,980	1,050	15.2	730	4	Bachelor's or Higher and Some Work Exp.
11-2022	Sales Managers	10,890	13,150	2,260	20.8	1,180	4	Bachelor's or Higher and Some Work Exp.
11-2031	Public Relations Managers	1,550	1,870	320	20.6	180	4	Bachelor's or Higher and Some Work Exp.
11-3011	Administrative Services Managers	11,820	13,140	1,320	11.2	1,400	4	Bachelor's or Higher and Some Work Exp.
11-3021	Computer & Information Systems Managers	7,050	8,950	1,900	27.0	930	4	Bachelor's or Higher and Some Work Exp.
11-3031	Financial Managers	17,770	20,180	2,410	13.6	1,990	4	Bachelor's or Higher and Some Work Exp.
11-3040	Human Resources Managers	5,610	5,920	310	5.5	*		
11-3051	Industrial Production Managers	5,500	5,340	-160	-2.9	610	5	Bachelor's Degree
11-3061	Purchasing Managers	3,470	3,250	-220	-6.3	730	4	Bachelor's or Higher and Some Work Exp.
11-3071	Transportation, Storage, & Distribution Managers	3,540	3,970	430	12.1	420	8	Work Experience
11-9021	Construction Managers	3,960	4,750	790	19.9	490	5	Bachelor's Degree
11-9031	Educ Admins, Preschool & Child Care Center	1,160	1,330	170	14.7	220	4	Bachelor's or Higher and Some Work Exp.
11-9032	Educ Admins, Elementary & Secondary School	4,730	5,350	620	13.1	900	4	Bachelor's or Higher and Some Work Exp.
11-9033	Education Administrators, Postsecondary	1,090	1,230	140	12.8	210	4	Bachelor's or Higher and Some Work Exp.
11-9041	Engineering Managers	7,420	7,030	-390	-5.3	810	4	Bachelor's or Higher and Some Work Exp.
11-9051	Food Service Managers	14,710	16,860	2,150	14.6	1,280	8	Work Experience
11-9061	Funeral Directors	450	500	50	11.1	60	6	Associate Degree
11-9081	Lodging Managers	430	450	20	4.7	40	8	Work Experience
11-9111	Medical & Health Services Managers	5,410	6,180	770	14.2	690	4	Bachelor's or Higher and Some Work Exp.
11-9121	Natural Sciences Managers	800	850	50	6.3	100	4	Bachelor's or Higher and Some Work Exp.

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Percent		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
11-9141	Property, Real Estate, & Community Assn Mgrs	8,040	9,400	1,360	16.9	980	5	Bachelor's Degree
11-9151	Social & Community Service Managers	2,210	2,410	200	9.0	300	5	Bachelor's Degree
11-9199	Managers, All Other	19,250	20,390	1,140	5.9	2,410	8	Work Experience
<b>13-0000</b>	<b>Business &amp; Financial Operations Occupations</b>	<b>167,940</b>	<b>183,560</b>	<b>15,620</b>	<b>9.3</b>	<b>24,200</b>		
13-1011	Agents & Bus Mgrs of Artists, Performers & Athletes	880	1,020	140	15.9	130	4	Bachelor's or Higher and Some Work Exp.
13-1021	Purchasing Agents & Buyers, Farm Products	400	450	50	12.5	60	8	Work Experience
13-1022	Wholesale & Retail Buyers, Except Farm Products	5,650	5,370	-280	-5.0	1,170	5	Bachelor's Degree
13-1023	Purch Agents, Ex Wholesale, Retail, & Farm Products	8,180	8,360	180	2.2	1,130	5	Bachelor's Degree
13-1031	Claims Adjusters, Examiners, & Investigators	7,760	8,530	770	9.9	630	9	Long-Term On-The-Job-Training
13-1032	Insurance Appraisers, Auto Damage	360	390	30	8.3	30	9	Long-Term On-The-Job-Training
13-1041	Comp Officers, Ex Ag, Const, Hlth & Safety, & Trans	4,950	5,130	180	3.6	890	9	Long-Term On-The-Job-Training
13-1051	Cost Estimators	5,100	5,690	590	11.6	820	5	Bachelor's Degree
13-1061	Emergency Management Specialists	160	170	10	6.3	30	8	Work Experience
13-1071	Employment, Recruitment, & Placement Specialists	4,850	5,170	320	6.6	670	5	Bachelor's Degree
13-1072	Compensation, Benefits, & Job Analysis Specialists	2,120	2,290	170	8.0	290	5	Bachelor's Degree
13-1073	Training & Development Specialists	4,330	4,800	470	10.9	610	5	Bachelor's Degree
13-1111	Management Analysts	11,100	12,190	1,090	9.8	700	4	Bachelor's or Higher and Some Work Exp.
13-1121	Meeting & Convention Planners	1,060	1,220	160	15.1	150	5	Bachelor's Degree
13-1199	Business Operations Specialists, All Other	52,390	58,010	5,620	10.7	9,700	5	Bachelor's Degree
13-2011	Accountants & Auditors	25,910	28,330	2,420	9.3	2,770	5	Bachelor's Degree
13-2021	Appraisers & Assessors of Real Estate	1,300	1,410	110	8.5	270	7	Post-Secondary Vocational Education
13-2031	Budget Analysts	1,400	1,500	100	7.1	200	5	Bachelor's Degree
13-2041	Credit Analysts	2,550	2,810	260	10.2	370	5	Bachelor's Degree
13-2051	Financial Analysts	4,790	5,360	570	11.9	480	5	Bachelor's Degree
13-2052	Personal Financial Advisors	3,120	3,840	720	23.1	280	5	Bachelor's Degree
13-2053	Insurance Underwriters	2,620	2,540	-80	-3.1	270	5	Bachelor's Degree
13-2061	Financial Examiners	690	730	40	5.8	90	5	Bachelor's Degree

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
13-2071	Loan Counselors	320	370	50	15.6	50	5	Bachelor's Degree
13-2072	Loan Officers	6,680	7,190	510	7.6	960	5	Bachelor's Degree
13-2081	Tax Examiners, Collectors, & Revenue Agents	1,660	1,760	100	6.0	310	5	Bachelor's Degree
13-2082	Tax Preparers	1,900	2,070	170	8.9	270	10	Moderate-Term On-The-Job-Training
13-2099	Financial Specialists, All Other	5,710	6,860	1,150	20.1	870	5	Bachelor's Degree
<b>15-29-0000</b>	<b>Professional &amp; Related Occupations</b>	<b>792,290</b>	<b>904,290</b>	<b>112,000</b>	<b>14.1</b>	<b>112,870</b>		
<b>15-0000</b>	<b>Computer &amp; Mathematical Science Occupations</b>	<b>80,350</b>	<b>106,210</b>	<b>25,860</b>	<b>32.2</b>	<b>5,560</b>		
15-1011	Computer & Information Scientists, Research	470	540	70	14.9	30	2	Doctoral Degree
15-1021	Computer Programmers	14,330	14,480	150	1.0	2,090	5	Bachelor's Degree
15-1031	Computer Software Engineers, Applications	11,960	17,050	5,090	42.6	650	5	Bachelor's Degree
15-1032	Computer Software Engineers, Systems Software	7,200	10,130	2,930	40.7	390	5	Bachelor's Degree
15-1041	Computer Support Specialists	13,830	21,220	7,390	53.4	490	6	Associate Degree
15-1051	Computer Systems Analysts	9,670	12,070	2,400	24.8	640	5	Bachelor's Degree
15-1061	Database Administrators	2,880	3,760	880	30.6	90	5	Bachelor's Degree
15-1071	Network & Computer Systems Administrators	9,910	14,470	4,560	46.0	340	5	Bachelor's Degree
15-1081	Network Systems & Data Communications Analysts	2,920	4,040	1,120	38.4	100	5	Bachelor's Degree
15-1099	Computer Specialists, All Other	4,160	5,430	1,270	30.5	280	7	Post-Secondary Vocational Education Bachelor's or Higher and Some Work Exp.
15-2011	Actuaries	340	350	10	2.9	30	4	Bachelor's or Higher and Some Work Exp.
15-2031	Operations Research Analysts	1,570	1,510	-60	-3.8	340	3	Master's Degree
15-2041	Statisticians	450	460	10	2.2	40	3	Master's Degree
15-2099	Mathematical Science Occupations, All Other	660	700	40	6.1	50	3	Master's Degree
<b>17-0000</b>	<b>Architecture &amp; Engineering Occupations</b>	<b>74,840</b>	<b>75,020</b>	<b>180</b>	<b>0.2</b>	<b>11,070</b>		
17-1011	Architects, Except Landscape & Naval	1,530	1,710	180	11.8	60	5	Bachelor's Degree

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Percent		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
17-1012	Landscape Architects	570	610	40	7.0	20	5	Bachelor's Degree
17-1022	Surveyors	560	570	10	1.8	120	5	Bachelor's Degree
17-2011	Aerospace Engineers	7,150	6,790	-360	-5.0	1,460	5	Bachelor's Degree
17-2031	Biomedical Engineers	160	200	40	25.0	30	5	Bachelor's Degree
17-2041	Chemical Engineers	840	900	60	7.1	110	5	Bachelor's Degree
17-2051	Civil Engineers	4,640	4,750	110	2.4	510	5	Bachelor's Degree
17-2061	Computer Hardware Engineers	1,450	1,510	60	4.1	150	5	Bachelor's Degree
17-2071	Electrical Engineers	5,500	5,510	10	0.2	700	5	Bachelor's Degree
17-2072	Electronics Engineers, Except Computer	4,300	4,620	320	7.4	560	5	Bachelor's Degree
17-2081	Environmental Engineers	1,330	1,460	130	9.8	190	5	Bachelor's Degree
17-2111	Health & Safety Engrs, Ex Mining Safety Engrs & Inspect	1,260	1,400	140	11.1	150	5	Bachelor's Degree
17-2112	Industrial Engineers	4,860	4,530	-330	-6.8	540	5	Bachelor's Degree
17-2131	Materials Engineers	490	470	-20	-4.1	70	5	Bachelor's Degree
17-2141	Mechanical Engineers	6,930	7,020	90	1.3	1,430	5	Bachelor's Degree
17-2151	Mining & Geological Engrs, Incl Mining Safety Engineers	130	140	10	7.7	20	5	Bachelor's Degree
17-2161	Nuclear Engineers	100	110	10	10.0	20	5	Bachelor's Degree
17-2171	Petroleum Engineers	390	350	-40	-10.3	60	5	Bachelor's Degree
17-2199	Engineers, All Other	10,850	10,080	-770	-7.1	1,440	5	Bachelor's Degree
17-3011	Architectural & Civil Drafters	1,630	1,770	140	8.6	360	7	Post-Secondary Vocational Education
17-3012	Electrical & Electronics Drafters	1,080	1,130	50	4.6	230	7	Post-Secondary Vocational Education
17-3013	Mechanical Drafters	1,190	1,140	-50	-4.2	250	7	Post-Secondary Vocational Education
17-3021	Aerospace Engineering & Operations Technicians	1,850	1,670	-180	-9.7	240	6	Associate Degree
17-3022	Civil Engineering Technicians	910	960	50	5.5	130	6	Associate Degree
17-3023	Electrical & Electronic Engineering Technicians	6,300	6,260	-40	-0.6	870	6	Associate Degree
17-3024	Electro-Mechanical Technicians	1,330	1,380	50	3.8	190	6	Associate Degree
17-3025	Environmental Engineering Technicians	370	400	30	8.1	50	6	Associate Degree
17-3026	Industrial Engineering Technicians	1,190	1,160	-30	-2.5	160	6	Associate Degree
17-3027	Mechanical Engineering Technicians	1,520	1,650	130	8.6	220	6	Associate Degree
17-3031	Surveying & Mapping Technicians	500	570	70	14.0	120	10	Moderate-Term On-The-Job-Training
17-3099	Drafters, Engineering, & Map Technicians, All Other	3,930	4,200	270	6.9	610	6	Associate Degree

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
19-0000	Life, Physical, & Social Science Occupations	29,130	32,280	3,150	10.8	6,030		
19-1010	Agricultural & Food Scientists	230	260	30	13.0	*		
19-1021	Biochemists & Biophysicists	250	300	50	20.0	70	2	Doctoral Degree
19-1022	Microbiologists	310	350	40	12.9	80	2	Doctoral Degree
19-1041	Epidemiologists	1,310	1,500	190	14.5	220	2	Doctoral Degree
19-1042	Medical Scientists, Except Epidemiologists	2,090	2,320	230	11.0	350	2	Doctoral Degree
19-1099	Life Scientists, All Other	1,970	2,220	250	12.7	530	2	Doctoral Degree
19-2012	Physicists	360	370	10	2.8	80	2	Doctoral Degree
19-2021	Atmospheric & Space Scientists	100	110	10	10.0	20	5	Bachelor's Degree
19-2031	Chemists	2,150	2,410	260	12.1	500	5	Bachelor's Degree
19-2032	Materials Scientists	310	320	10	3.2	70	5	Bachelor's Degree
19-2041	Environmental Scientists & Specialists, Incl Health Geoscientists, Except Hydrologists & Geographer	600	650	50	8.3	140	5	Bachelor's Degree
19-2042	Hydrologists	1,140	1,230	90	7.9	270	5	Bachelor's Degree
19-2043	Physical Scientists, All Other	100	130	30	30.0	30	5	Bachelor's Degree
19-2099	Market Research Analysts	690	730	40	5.8	220	5	Bachelor's Degree
19-3021	Survey Researchers	3,630	4,080	450	12.4	590	5	Bachelor's Degree
19-3022	Clinical, Counseling, & School Psychologists	1,060	1,260	200	18.9	180	5	Bachelor's Degree
19-3031	Urban & Regional Planners	3,300	3,610	310	9.4	550	3	Master's Degree
19-3051	Social Scientists & Related Workers, All Other	630	690	60	9.5	110	3	Master's Degree
19-3099	Agricultural & Food Science Technicians	1,080	1,160	80	7.4	200	3	Master's Degree
19-4011	Biological Technicians	350	370	20	5.7	60	6	Associate Degree
19-4021	Chemical Technicians	980	1,130	150	15.3	170	6	Associate Degree
19-4031	Geological & Petroleum Technicians	1,370	1,520	150	10.9	230	6	Associate Degree
19-4041	Environ Science & Protection Techs, Incl Health	170	180	10	5.9	30	6	Associate Degree
19-4091	Forensic Science Technicians	560	600	40	7.1	150	6	Associate Degree
19-4092	Forest & Conservation Technicians	110	120	10	9.1	30	6	Associate Degree
19-4093	Life, Physical, & Social Science Techs, All Other	270	270	0	0.0	70	6	Associate Degree
19-4099		4,010	4,390	380	9.5	1,080	6	Associate Degree

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Community & Social Services Occupations	Annual Average Employment		Employment Change Percent		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	13.3			
21-0000		52,280	59,230	6,950	13.3	6,300		
21-1011	Substance Abuse & Behavioral Disorder Counselors	1,300	1,430	130	10.0	190	3	Master's Degree
21-1012	Educational, Vocational, & School Counselors	5,770	6,890	1,120	19.4	880	3	Master's Degree
21-1013	Marriage & Family Therapists	3,980	4,270	290	7.3	580	3	Master's Degree
21-1014	Mental Health Counselors	2,500	2,510	10	0.4	350	3	Master's Degree
21-1015	Rehabilitation Counselors	1,890	1,970	80	4.2	270	3	Master's Degree
21-1021	Child, Family, & School Social Workers	8,860	10,000	1,140	12.9	720	5	Bachelor's Degree
21-1022	Medical & Public Health Social Workers	3,880	4,360	480	12.4	310	5	Bachelor's Degree
21-1023	Mental Health & Substance Abuse Social Workers	1,690	1,950	260	15.4	140	3	Master's Degree
21-1091	Health Educators	910	990	80	8.8	100	3	Master's Degree
21-1092	Probation Officers & Correctional Treatment Specialists	3,600	4,150	550	15.3	390	5	Bachelor's Degree
21-1093	Social & Human Service Assistants	5,170	6,570	1,400	27.1	600	10	Moderate-Term On-The-Job-Training
21-2011	Clergy	2,340	2,570	230	9.8	470	1	First Professional Degree
21-2021	Directors, Religious Activities & Education	1,860	2,060	200	10.8	230	5	Bachelor's Degree
21-9099	Counselors, Social & Religious Workers, All Other	8,530	9,510	980	11.5	1,070	5	Bachelor's Degree
23-0000	Legal Occupations	33,590	37,970	4,380	13.0	2,000		
23-1011	Lawyers	19,310	21,550	2,240	11.6	940	1	First Professional Degree
23-1021	Admin Law Judges, Adjudicators, & Hearing Officers	630	640	10	1.6	130	4	Bachelor's or Higher and Some Work Exp.
23-1022	Arbitrators, Mediators, & Conciliators	320	390	70	21.9	70	4	Bachelor's or Higher and Some Work Exp.
23-1023	Judges, Magistrate Judges, & Magistrates	660	670	10	1.5	130	4	Bachelor's or Higher and Some Work Exp.
23-2011	Paralegals & Legal Assistants	5,270	6,480	1,210	23.0	240	6	Associate Degree
23-2091	Court Reporters	1,350	1,520	170	12.6	90	7	Post-Secondary Vocational Education
23-2092	Law Clerks	750	730	-20	-2.7	50	5	Bachelor's Degree
23-2093	Title Examiners, Abstractors, & Searchers	1,260	1,250	-10	-0.8	80	10	Moderate-Term On-The-Job-Training
23-9099	Legal & Related Workers, All Other	4,040	4,740	700	17.3	270	5	Bachelor's Degree

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
25-0000	Education, Training, & Library Occupations	236,700	275,410	38,710	16.4	38,160		
25-1011	Business Teachers, Postsecondary	760	910	150	19.7	160	2	Doctoral Degree
25-1021	Computer Science Teachers, Postsecondary	390	470	80	20.5	80	2	Doctoral Degree
25-1022	Mathematical Science Teachers, Postsecondary	420	510	90	21.4	90	2	Doctoral Degree
25-1032	Engineering Teachers, Postsecondary	280	340	60	21.4	60	2	Doctoral Degree
25-1042	Biological Science Teachers, Postsecondary	410	490	80	19.5	90	2	Doctoral Degree
25-1051	Atmos, Earth, Marine, & Space Sciences Teachers	110	130	20	18.2	20	2	Doctoral Degree
25-1052	Chemistry Teachers, Postsecondary	100	120	20	20.0	20	2	Doctoral Degree
25-1054	Physics Teachers, Postsecondary	140	170	30	21.4	30	2	Doctoral Degree
25-1065	Political Science Teachers, Postsecondary	150	180	30	20.0	30	2	Doctoral Degree
25-1066	Psychology Teachers, Postsecondary	230	280	50	21.7	50	2	Doctoral Degree
25-1071	Health Specialties Teachers, Postsecondary	1,240	1,490	250	20.2	260	2	Doctoral Degree
25-1072	Nursing Instructors & Teachers, Postsecondary	470	540	70	14.9	100	3	Master's Degree
25-1081	Education Teachers, Postsecondary	280	330	50	17.9	60	2	Doctoral Degree
25-1112	Law Teachers, Postsecondary	130	150	20	15.4	30	2	Doctoral Degree
25-1121	Art, Drama, & Music Teachers, Postsecondary	1,400	1,650	250	17.9	290	2	Doctoral Degree
25-1122	Communications Teachers, Postsecondary	560	680	120	21.4	120	2	Doctoral Degree
25-1123	English Lang & Literature Teachers, Postsecondary	740	890	150	20.3	150	2	Doctoral Degree
25-1124	Foreign Language & Lit Teachers, Postsecondary	260	320	60	23.1	60	2	Doctoral Degree
25-1125	History Teachers, Postsecondary	140	160	20	14.3	30	2	Doctoral Degree
25-1126	Philosophy & Religion Teachers, Postsecondary	160	190	30	18.8	30	2	Doctoral Degree
25-1191	Graduate Teaching Assistants	3,940	4,760	820	20.8	830	5	Bachelor's Degree
25-1193	Recreation & Fitness Studies Teachers, Postsecondary	140	170	30	21.4	30	3	Master's Degree
25-1194	Vocational Education Teachers, Postsecondary	3,890	4,710	820	21.1	820	8	Work Experience
25-1199	Postsecondary Teachers, All Other	13,870	16,750	2,880	20.8	2,940	2	Doctoral Degree
25-2011	Preschool Teachers, Except Special Education	11,490	11,990	500	4.4	1,000	5	Bachelor's Degree
25-2012	Kindergarten Teachers, Except Special Education	2,960	3,350	390	13.2	270	5	Bachelor's Degree
25-2021	Elementary School Teachers, Except Special Ed	50,140	56,710	6,570	13.1	8,350	5	Bachelor's Degree
25-2022	Middle School Teachers, Ex Special & Vocational Ed	7,090	7,840	750	10.6	1,170	5	Bachelor's Degree

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
25-2023	Vocational Education Teachers, Middle School	110	130	20	18.2	20	5	Bachelor's Degree
25-2031	Secondary School Teachers, Ex Special & Voc Ed	29,340	34,320	4,980	17.0	6,730	5	Bachelor's Degree
25-2032	Vocational Education Teachers, Secondary School	1,190	1,320	130	10.9	270	5	Bachelor's Degree
25-2041	Special Ed Teachers, Preschool, Kindergarten, & Elem Sch	7,450	9,590	2,140	28.7	730	5	Bachelor's Degree
25-2042	Special Education Teachers, Middle School	930	1,120	190	20.4	90	5	Bachelor's Degree
25-2043	Special Education Teachers, Secondary School	2,820	3,410	590	20.9	270	5	Bachelor's Degree
25-3011	Adult Literacy, Remedial Ed, & GED Teachers & Instructrs	4,220	4,890	670	15.9	310	5	Bachelor's Degree
25-3021	Self-Enrichment Education Teachers	4,850	5,590	740	15.3	360	8	Work Experience
25-3999	Teachers, Primary, Secondary, & Adult, All Other	14,850	17,530	2,680	18.0	1,120	5	Bachelor's Degree
25-4010	Archivists	820	920	100	12.2	*	3	Master's Degree
25-4021	Librarians	2,500	2,690	190	7.6	370	3	Master's Degree
25-4031	Library Technicians	4,020	4,590	570	14.2	1,370	11	Short-Term On-The-Job-Training
25-9011	Audio-Visual Collections Specialists	1,920	2,230	310	16.1	210	10	Moderate-Term On-The-Job-Training
25-9031	Instructional Coordinators	2,480	2,940	460	18.5	270	3	Master's Degree
25-9041	Teacher Assistants	54,480	64,640	10,160	18.6	8,570	11	Short-Term On-The-Job-Training
25-9099	Education, Training, & Library Workers, All Other	2,830	3,220	390	13.8	300	5	Bachelor's Degree
27-0000	Arts, Design, Entertainment, Sports, & Media Occs	120,710	134,000	13,290	11.0	17,090		
27-1011	Art Directors	910	1,140	230	25.3	150	4	Bachelor's or Higher and Some Work Exp.
27-1013	Fine Artists, Incl Painters, Sculptors, & Illustrators	420	450	30	7.1	60	9	Long-Term On-The-Job-Training
27-1014	Multi-Media Artists & Animators	2,900	3,540	640	22.1	460	5	Bachelor's Degree
27-1021	Commercial & Industrial Designers	480	520	40	8.3	30	5	Bachelor's Degree
27-1022	Fashion Designers	1,730	2,090	360	20.8	130	5	Moderate-Term On-The-Job-Training
27-1023	Floral Designers	1,700	1,790	90	5.3	120	10	Moderate-Term On-The-Job-Training
27-1024	Graphic Designers	5,810	7,000	1,190	20.5	440	5	Bachelor's Degree
27-1025	Interior Designers	1,450	1,730	280	19.3	110	5	Bachelor's Degree
27-1026	Merchandise Displayers & Window Trimmers	2,060	2,480	420	20.4	160	10	Moderate-Term On-The-Job-Training
27-1027	Set & Exhibit Designers	440	500	60	13.6	30	5	Bachelor's Degree
27-1099	Art & Design Workers, All Other	2,160	2,430	270	12.5	260	5	Bachelor's Degree

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
27-2011	Actors	33,130	34,480	1,350	4.1	4,520	9	Long-Term On-The-Job-Training
27-2012	Producers & Directors	8,390	9,630	1,240	14.8	1,210	4	Bachelor's or Higher and Some Work Exp.
27-2021	Athletes & Sports Competitors	290	340	50	17.2	40	9	Long-Term On-The-Job-Training
27-2022	Coaches & Scouts	1,670	1,940	270	16.2	250	9	Long-Term On-The-Job-Training
27-2031	Dancers	590	690	100	16.9	90	9	Long-Term On-The-Job-Training
27-2032	Choreographers	210	240	30	14.3	30	8	Work Experience
27-2041	Music Directors & Composers	540	600	60	11.1	70	4	Bachelor's or Higher and Some Work Exp.
27-2042	Musicians & Singers	5,860	6,870	1,010	17.2	830	9	Long-Term On-The-Job-Training
27-2099	Entertainers & Performers, Sports & Rel Workers	13,820	15,200	1,380	10.0	1,940	9	Long-Term On-The-Job-Training
27-3010	Announcers	1,390	1,360	-30	-2.2	0	*	
27-3020	News Analysts, Reporters & Correspondents	2,230	2,250	20	0.9	530	5	Bachelor's Degree
27-3031	Public Relations Specialists	4,100	4,890	790	19.3	1,180	5	Bachelor's Degree
27-3041	Editors	5,010	5,510	500	10.0	350	5	Bachelor's Degree
27-3042	Technical Writers	1,600	1,760	160	10.0	440	5	Bachelor's Degree
27-3043	Writers & Authors	3,590	4,150	560	15.6	120	9	Long-Term On-The-Job-Training
27-3091	Interpreters & Translators	840	940	100	11.9	410	9	Long-Term On-The-Job-Training
27-3099	Media & Communication Workers, All Other	2,810	3,220	410	14.6	380	7	Post-Secondary Vocational Education
27-4011	Audio & Video Equipment Technicians	1,650	1,780	130	7.9	90	9	Long-Term On-The-Job-Training
27-4012	Broadcast Technicians	1,770	1,920	150	8.5	190	7	Post-Secondary Vocational Education
27-4013	Radio Operators	450	470	20	4.4	290	9	Long-Term On-The-Job-Training
27-4014	Sound Engineering Technicians	920	960	40	4.3	260	10	Moderate-Term On-The-Job-Training
27-4021	Photographers	1,940	2,190	250	12.9	330	5	Bachelor's Degree
27-4031	Camera Ops, Television, Video, & Motion Picture	1,750	2,030	280	16.0	1,240	10	Moderate-Term On-The-Job-Training
27-4032	Film & Video Editors	2,290	2,520	230	10.0	1,240	10	Moderate-Term On-The-Job-Training
27-4099	Media & Communication Equip Workers, All Other	3,810	4,390	580	15.2	26,600		
<b>29-0000</b>	<b>Healthcare Practitioners &amp; Technical Occupations</b>	<b>164,690</b>	<b>184,170</b>	<b>19,480</b>	<b>11.8</b>			
29-1011	Chiropractors	610	630	20	3.3	80	1	First Professional Degree
29-1020	Dentists	1,220	1,250	30	2.5	*		
29-1031	Dietitians & Nutritionists	1,440	1,540	100	6.9	280	5	Bachelor's Degree

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
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SOC Code	Occupation	Annual Average Employment		Number	Percent	Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008					
29-1041	Optometrists	430	450	20	4.7	60	1	First Professional Degree
29-1051	Pharmacists	5,390	6,140	750	13.9	1,200	1	First Professional Degree
29-1062	Family & General Practitioners	5,520	6,030	510	9.2	590	1	First Professional Degree
29-1063	Internists, General	580	600	20	3.4	60	1	First Professional Degree
29-1064	Obstetricians & Gynecologists	250	260	10	4.0	30	1	First Professional Degree
29-1065	Pediatricians, General	330	370	40	12.1	40	1	First Professional Degree
29-1066	Psychiatrists	610	680	70	11.5	70	1	First Professional Degree
29-1067	Surgeons	270	290	20	7.4	30	1	First Professional Degree
29-1071	Physician Assistants	1,220	1,440	220	18.0	200	5	Bachelor's Degree
29-1081	Podiatrists	490	490	0	0.0	60	1	First Professional Degree
29-1111	Registered Nurses	65,450	73,600	8,150	12.5	9,640	6	Associate Degree
29-1121	Audiologists	250	300	50	20.0	50	3	Master's Degree
29-1122	Occupational Therapists	2,220	2,530	310	14.0	410	5	Bachelor's Degree
29-1123	Physical Therapists	2,890	3,210	320	11.1	530	3	Master's Degree
29-1124	Radiation Therapists	120	130	10	8.3	20	6	Associate Degree
29-1125	Recreational Therapists	460	470	10	2.2	80	5	Bachelor's Degree
29-1126	Respiratory Therapists	2,110	2,590	480	22.7	410	6	Associate Degree
29-1127	Speech-Language Pathologists	1,030	1,260	230	22.3	200	3	Master's Degree
29-1131	Veterinarians	470	530	60	12.8	60	1	First Professional Degree
29-1199	Health Diagnosing & Treating Practitioners, All Other	1,980	2,190	210	10.6	320	1	First Professional Degree
29-2011	Medical & Clinical Laboratory Technologists	4,640	5,110	470	10.1	790	5	Bachelor's Degree
29-2012	Medical & Clinical Laboratory Technicians	4,010	4,360	350	8.7	680	6	Associate Degree
29-2021	Dental Hygienists	3,820	4,430	610	16.0	420	6	Associate Degree
29-2031	Cardiovascular Technologists & Technicians	910	1,080	170	18.7	150	6	Associate Degree
29-2032	Diagnostic Medical Sonographers	730	800	70	9.6	120	6	Associate Degree
29-2033	Nuclear Medicine Technologists	310	340	30	9.7	50	6	Associate Degree
29-2034	Radiologic Technologists & Technicians	4,290	4,640	350	8.2	680	6	Associate Degree
29-2041	Emergency Medical Technicians & Paramedics	2,730	3,100	370	13.6	510	7	Post-Secondary Vocational Education
29-2051	Dietetic Technicians	1,150	1,290	140	12.2	220	10	Moderate-Term On-The-Job-Training
29-2052	Pharmacy Technicians	4,660	5,700	1,040	22.3	930	10	Moderate-Term On-The-Job-Training
29-2053	Psychiatric Technicians	3,490	3,550	60	1.7	630	7	Post-Secondary Vocational Education
29-2054	Respiratory Therapy Technicians	700	860	160	22.9	140	7	Post-Secondary Vocational Education
29-2055	Surgical Technologists	2,040	2,370	330	16.2	400	7	Post-Secondary Vocational Education
29-2056	Veterinary Technologists & Technicians	1,220	1,330	110	9.0	230	6	Associate Degree

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		2001 <sup>3</sup>	2008				
29-2061	Licensed Practical & Licensed Vocational Nurses	17,070	18,200	1,130	6.6	3,140	7 Post-Secondary Vocational Education
29-2071	Medical Records & Health Information Technicians	3,960	4,840	880	22.2	680	6 Associate Degree
29-2081	Opticians, Dispensing	740	760	20	2.7	100	9 Long-Term On-The-Job-Training
29-9010	Occupational Health & Safety Specialists & Techs	480	520	40	8.3	*	Bachelor's Degree
29-9091	Athletic Trainers	210	230	20	9.5	40	5 Bachelor's Degree
29-9199	Health Professionals & Technicians, All Other	12,140	13,630	1,490	12.3	2,320	6 Associate Degree
31-39-0000	<b>Service Occupations</b>	<b>651,030</b>	<b>734,640</b>	<b>83,610</b>	<b>12.8</b>	<b>162,970</b>	
31-00000	<b>Healthcare Support Occupations</b>	<b>81,620</b>	<b>92,940</b>	<b>11,320</b>	<b>13.9</b>	<b>11,320</b>	
31-1011	Home Health Aides	9,010	10,370	1,360	15.1	850	11 Short-Term On-The-Job-Training
31-1012	Nursing Aides, Orderlies, & Attendants	30,190	33,390	3,200	10.6	2,800	11 Short-Term On-The-Job-Training
31-1013	Psychiatric Aides	600	630	30	5.0	50	11 Short-Term On-The-Job-Training
31-2011	Occupational Therapist Assistants	340	400	60	17.6	80	6 Associate Degree
31-2012	Occupational Therapist Aides	180	210	30	16.7	40	11 Short-Term On-The-Job-Training
31-2021	Physical Therapist Assistants	760	890	130	17.1	170	6 Associate Degree
31-2022	Physical Therapist Aides	830	990	160	19.3	190	11 Short-Term On-The-Job-Training
31-9011	Massage Therapists	620	700	80	12.9	110	7 Post-Secondary Vocational Education
31-9091	Dental Assistants	11,570	13,460	1,890	16.3	1,540	10 Moderate-Term On-The-Job-Training
31-9092	Medical Assistants	13,270	15,950	2,680	20.2	2,700	10 Moderate-Term On-The-Job-Training
31-9093	Medical Equipment Preparers	510	560	50	9.8	100	11 Short-Term On-The-Job-Training
31-9094	Medical Transcriptionists	2,250	2,550	300	13.3	440	7 Post-Secondary Vocational Education
31-9095	Pharmacy Aides	1,320	1,510	190	14.4	260	11 Short-Term On-The-Job-Training
31-9096	Veterinary Assistants & Lab Animal Caretakers	830	920	90	10.8	160	11 Short-Term On-The-Job-Training
31-9099	Healthcare Support Workers, All Other	9,340	10,410	1,070	11.5	1,830	11 Short-Term On-The-Job-Training

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		2001 <sup>3</sup>	2008	Number	Percent			
<b>33-0000</b>	<b>Protective Service Occupations</b>	<b>96,480</b>	<b>114,400</b>	<b>17,920</b>	<b>18.6</b>	<b>22,450</b>		
33-1011	First-Line Sups/Managers of Correctional Officers	190	220	30	15.8	20	8	Work Experience
33-1012	First-Line Sups/Managers of Police & Detectives	3,040	3,300	260	8.6	590	8	Work Experience
33-1021	First-Line Sups/Mgrs of Fire Fighting & Prevention	1,500	1,600	100	6.7	340	8	Work Experience
33-1099	First-Line Sups/Mgrs, Protective Serv Wrks, All Other	1,800	2,120	320	17.8	420	8	Work Experience
33-2011	Fire Fighters	5,260	5,730	470	8.9	980	9	Long-Term On-The-Job-Training
33-2021	Fire Inspectors & Investigators	110	110	0	0.0	20	8	Work Experience
33-3012	Correctional Officers & Jailers	1,680	1,950	270	16.1	310	10	Moderate-Term On-The-Job-Training
33-3021	Detectives & Criminal Investigators	2,020	2,330	310	15.3	340	8	Work Experience
33-3031	Fish & Game Wardens	150	160	10	6.7	10	9	Long-Term On-The-Job-Training
33-3041	Parking Enforcement Workers	330	360	30	9.1	30	11	Short-Term On-The-Job-Training
33-3051	Police & Sheriff's Patrol Officers	17,340	20,180	2,840	16.4	2,730	9	Long-Term On-The-Job-Training
33-3052	Transit & Railroad Police	830	950	120	14.5	140	9	Long-Term On-The-Job-Training
33-9011	Animal Control Workers	320	350	30	9.4	190	10	Moderate-Term On-The-Job-Training
33-9021	Private Detectives & Investigators	1,230	1,590	360	29.3	280	8	Work Experience
33-9031	Gaming Surveillance Officers & Gaming Investigators	130	130	0	0.0	30	10	Moderate-Term On-The-Job-Training
33-9032	Security Guards	51,720	63,410	11,690	22.6	11,120	11	Short-Term On-The-Job-Training
33-9091	Crossing Guards	1,400	1,630	230	16.4	370	11	Short-Term On-The-Job-Training
33-9099	Protective Service Workers, All Other	7,430	8,280	850	11.4	4,530	11	Short-Term On-The-Job-Training
<b>35-0000</b>	<b>Food Preparation &amp; Serving Related Occupations</b>	<b>284,400</b>	<b>311,430</b>	<b>27,030</b>	<b>9.5</b>	<b>95,270</b>		
35-1011	Chefs & Head Cooks	2,040	2,140	100	4.9	470	7	Post-Secondary Vocational Education
35-1012	First-Line Sups/Mgrs of Food Prep & Serving Wrks	21,370	23,080	1,710	8.0	3,930	8	Work Experience
35-2011	Cooks, Fast Food	18,350	18,280	-70	-0.4	3,790	11	Short-Term On-The-Job-Training
35-2012	Cooks, Institution & Cafeteria	6,480	6,780	300	4.6	1,370	9	Long-Term On-The-Job-Training
35-2014	Cooks, Restaurant	29,980	34,830	4,850	16.2	6,710	9	Long-Term On-The-Job-Training
35-2015	Cooks, Short Order	2,740	2,860	120	4.4	580	11	Short-Term On-The-Job-Training
35-2021	Food Preparation Workers	20,460	22,680	2,220	10.9	6,070	11	Short-Term On-The-Job-Training
35-3011	Bartenders	8,700	9,460	760	8.7	2,500	11	Short-Term On-The-Job-Training

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		2001 <sup>3</sup>	2008	Number	Percent			
35-3021	Comb Food Prep & Serving Wrks, Incl Fast Food	47,160	55,720	8,560	18.2	22,880	11	Short-Term On-The-Job-Training
35-3022	Counter Attends, Cafe, Food Concess., & Coffee Shop	11,930	13,350	1,420	11.9	7,490	11	Short-Term On-The-Job-Training
35-3031	Waiters & Waitresses	60,260	68,240	7,980	13.2	25,610	11	Short-Term On-The-Job-Training
35-3041	Food Servers, Nonrestaurant	3,570	3,940	370	10.4	1,230	11	Short-Term On-The-Job-Training
35-9011	Dining Rm & Cafeteria Attendants & Bartender Helpers	21,480	20,250	-1,230	-5.7	5,110	11	Short-Term On-The-Job-Training
35-9021	Dishwashers	16,260	15,170	-1,090	-6.7	4,370	11	Short-Term On-The-Job-Training
35-9031	Hosts & Hostess, Restaurant, Lounge, & Coffee Shop	11,260	12,420	1,160	10.3	2,520	11	Short-Term On-The-Job-Training
35-9099	Food Prep & Serving Related Workers, All Other	2,360	2,230	-130	-5.5	640	11	Short-Term On-The-Job-Training
<b>37-0000</b>	<b>Building &amp; Grounds Cleaning &amp; Maintenance Occs</b>	<b>117,500</b>	<b>135,890</b>	<b>18,390</b>	<b>15.7</b>	<b>17,900</b>		
37-1011	First-Line Sups/Mgrs of Housekeep & Janitor Wrks	4,730	5,240	510	10.8	950	8	Work Experience
37-1012	First-Line Sups/Mgrs of Landscp. Lwn Serv, & Grndskeep	2,030	2,080	50	2.5	80	8	Work Experience
37-2011	Janitors & Clean, Ex Maids & Housekeep Cleaners	62,350	72,020	9,670	15.5	8,490	11	Short-Term On-The-Job-Training
37-2012	Maids & Housekeeping Cleaners	22,730	26,520	3,790	16.7	3,730	11	Short-Term On-The-Job-Training
37-2021	Pest Control Workers	4,020	5,490	1,470	36.6	670	10	Moderate-Term On-The-Job-Training
37-3011	Landscaping & Groundskeeping Workers	18,630	21,190	2,560	13.7	3,510	11	Short-Term On-The-Job-Training
37-3013	Tree Trimmers & Pruners	850	830	-20	-2.4	150	11	Short-Term On-The-Job-Training
37-9099	Bldng & Grounds Cleaning & Maint Wrks, All Other	2,160	2,520	360	16.7	320	11	Short-Term On-The-Job-Training
<b>39-0000</b>	<b>Personal Care &amp; Service Occupations</b>	<b>71,030</b>	<b>79,980</b>	<b>8,950</b>	<b>12.6</b>	<b>16,030</b>		
39-1011	Gaming Supervisors	390	440	50	12.8	80	7	Post-Secondary Vocational Education
39-1021	First-Line Sups/Mgrs of Personal Service Workers	2,140	2,420	280	13.1	450	8	Work Experience
39-2011	Animal Trainers	220	260	40	18.2	30	10	Moderate-Term On-The-Job-Training
39-2021	Nonfarm Animal Caretakers	2,840	3,270	430	15.1	450	11	Short-Term On-The-Job-Training
39-3011	Gaming Dealers	2,650	3,130	480	18.1	730	7	Post-Secondary Vocational Education
39-3021	Motion Picture Projectionists	1,770	1,580	-190	-10.7	280	11	Short-Term On-The-Job-Training
39-3031	Ushers, Lobby Attendants, & Ticket Takers	3,420	3,850	430	12.6	2,200	11	Short-Term On-The-Job-Training
39-3091	Amusement & Recreation Attendants	4,080	4,690	610	15.0	1,070	11	Short-Term On-The-Job-Training

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		2001 <sup>3</sup>	2008	Number	Percent			
39-3092	Costume Attendants	100	110	10	10.0	10	11	Short-Term On-The-Job-Training
39-3093	Locker Room, Coatroom, & Dressing Room Attendants	660	710	50	7.6	150	11	Short-Term On-The-Job-Training
39-3099	Entertainment Attendants & Rel Workers, All Others	100	120	20	20.0	30	11	Short-Term On-The-Job-Training
39-3199	Gaming Workers, All Other	1,250	1,370	120	9.6	320	10	Moderate-Term On-The-Job-Training
39-4011	Embalmers	160	170	10	6.3	30	7	Post-Secondary Vocational Education
39-4021	Funeral Attendants	430	520	90	20.9	80	11	Short-Term On-The-Job-Training
39-5011	Barbers	170	180	10	5.9	40	7	Post-Secondary Vocational Education
39-5012	Hairdressers, Hairstylists, & Cosmetologists	7,400	8,150	750	10.1	1,320	7	Post-Secondary Vocational Education
39-5092	Manicurists & Pedicurists	200	250	50	25.0	40	7	Post-Secondary Vocational Education
39-5093	Shampooers	310	340	30	9.7	60	11	Short-Term On-The-Job-Training
39-5094	Skin Care Specialists	480	540	60	12.5	90	7	Post-Secondary Vocational Education
39-6011	Baggage Porters & Bellhops	1,820	2,010	190	10.4	480	11	Short-Term On-The-Job-Training
39-6012	Concierges	400	450	50	12.5	110	8	Work Experience
39-6021	Tour Guides & Escorts	460	500	40	8.7	110	10	Moderate-Term On-The-Job-Training
39-6022	Travel Guides	400	440	40	10.0	90	9	Long-Term On-The-Job-Training
39-6031	Flight Attendants	6,880	7,220	340	4.9	1,770	9	Long-Term On-The-Job-Training
39-6032	Trans Attendants, Ex Flight Attendants & Bag Porters	920	1,110	190	20.7	260	11	Short-Term On-The-Job-Training
39-9011	Child Care Workers	8,150	9,590	1,440	17.7	2,160	11	Short-Term On-The-Job-Training
39-9021	Personal & Home Care Aides	6,900	8,040	1,140	16.5	790	11	Short-Term On-The-Job-Training
39-9031	Fitness Trainers & Aerobics Instructors	4,840	5,760	920	19.0	760	7	Post-Secondary Vocational Education
39-9032	Recreation Workers	7,560	8,320	760	10.1	1,140	5	Bachelor's Degree
39-9041	Residential Advisors	180	200	20	11.1	30	10	Moderate-Term On-The-Job-Training
39-9099	Personal Care & Service Workers, All Other	3,750	4,240	490	13.1	870	11	Short-Term On-The-Job-Training
<b>41-0000</b>	<b>Sales &amp; Related Occupations</b>	<b>393,000</b>	<b>435,380</b>	<b>42,380</b>	<b>10.8</b>	<b>97,760</b>		
41-1011	First-Line Sups/Mgrs of Retail Sales Workers	35,020	39,290	4,270	12.2	3,690	8	Work Experience
41-1012	First-Line Sups/Mgrs of Non-Retail Sales Workers	8,830	9,290	460	5.2	920	8	Work Experience
41-2011	Cashiers	92,410	103,620	11,210	12.1	32,630	11	Short-Term On-The-Job-Training
41-2012	Gaming Change Persons & Booth Cashiers	670	800	130	19.4	240	11	Short-Term On-The-Job-Training
41-2021	Counter & Rental Clerks	16,150	18,380	2,230	13.8	5,650	11	Short-Term On-The-Job-Training

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		2001 <sup>3</sup>	2008				
41-2022	Parts Salespersons	5,790	5,480	-310	-5.4	1,180	10 Moderate-Term On-The-Job-Training
41-2031	Retail Salespersons	108,710	122,650	13,940	12.8	31,600	11 Short-Term On-The-Job-Training
41-3011	Advertising Sales Agents	6,610	7,910	1,300	19.7	1,020	10 Moderate-Term On-The-Job-Training
41-3021	Insurance Sales Agents	9,450	10,180	730	7.7	1,740	5 Bachelor's Degree
41-3031	Securities, Commodities, & Financial Serv Sales	5,650	6,550	900	15.9	340	5 Bachelor's Degree
41-3041	Travel Agents	5,720	6,280	560	9.8	1,020	7 Post-Secondary Vocational Education
41-4011	Sales Reps, Wholesale & Mfg, Tech & Scientific Products	7,870	7,940	70	0.9	1,500	10 Moderate-Term On-The-Job-Training
41-4012	Sales Reps, Wholesale & Mfg, Ex Tech & Scientific Product	49,970	51,490	1,520	3.0	9,610	10 Moderate-Term On-The-Job-Training
41-9011	Demonstrators & Product Promoters	3,460	4,010	550	15.9	850	10 Moderate-Term On-The-Job-Training
41-9021	Real Estate Brokers	870	930	60	6.9	110	8 Work Experience
41-9022	Real Estate Sales Agents	4,210	4,700	490	11.6	530	7 Post-Secondary Vocational Education
41-9031	Sales Engineers	2,120	2,210	90	4.2	390	5 Bachelor's Degree
41-9041	Telemarketers	10,310	11,450	1,140	11.1	1,570	11 Short-Term On-The-Job-Training
41-9091	Dr-to-Dr Sales Wrkrs, Nws & St Vndrs, & Rel Wrks	970	1,020	50	5.2	180	11 Short-Term On-The-Job-Training
41-9099	Sales & Related Workers, All Other	18,210	21,200	2,990	16.4	2,990	10 Moderate-Term On-The-Job-Training
<b>43-0000</b>	<b>Office &amp; Administrative Support Occupations</b>	<b>824,760</b>	<b>857,890</b>	<b>33,130</b>	<b>4.0</b>	<b>122,680</b>	
43-1011	First-Line Sups/Mgrs of Office & Admin Support Wrkrs	50,490	52,370	1,880	3.7	6,820	8 Work Experience
43-2011	Switchboard Operators, Including Answering Service	6,880	5,900	-980	-14.2	1,330	11 Short-Term On-The-Job-Training
43-2021	Telephone Operators	1,440	1,090	-350	-24.3	260	11 Short-Term On-The-Job-Training
43-2099	Communications Equipment Operators, All Other	310	260	-50	-16.1	70	11 Short-Term On-The-Job-Training
43-3011	Bill & Account Collectors	12,290	14,080	1,790	14.6	2,270	11 Short-Term On-The-Job-Training
43-3021	Billing & Posting Clerks & Machine Operators	13,170	12,930	-240	-1.8	2,230	11 Short-Term On-The-Job-Training
43-3031	Bookkeeping, Accounting, & Auditing Clerks	54,010	55,230	1,220	2.3	7,200	10 Moderate-Term On-The-Job-Training
43-3041	Gaming Cage Workers	280	310	30	10.7	100	11 Short-Term On-The-Job-Training
43-3051	Payroll & Timekeeping Clerks	5,420	5,410	-10	-0.2	1,100	11 Short-Term On-The-Job-Training
43-3061	Procurement Clerks	1,820	1,660	-160	-8.8	280	11 Short-Term On-The-Job-Training
43-3071	Tellers	17,310	16,390	-920	-5.3	5,770	11 Short-Term On-The-Job-Training
43-4011	Brokerage Clerks	3,010	2,980	-30	-1.0	270	10 Moderate-Term On-The-Job-Training
43-4021	Correspondence Clerks	1,000	1,030	30	3.0	210	11 Short-Term On-The-Job-Training

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		2001 <sup>3</sup>	2008	Number	Percent			
43-4031	Court, Municipal, & License Clerks	2,320	2,530	210	9.1	270	11	Short-Term On-The-Job-Training
43-4041	Credit Authorizers, Checkers, & Clerks	3,030	3,090	60	2.0	190	11	Short-Term On-The-Job-Training
43-4051	Customer Service Representatives	55,070	64,570	9,500	17.3	3,450	10	Moderate-Term On-The-Job-Training
43-4061	Eligibility Interviewers, Government Programs	8,170	7,660	-510	-6.2	1,600	10	Moderate-Term On-The-Job-Training
43-4071	File Clerks	8,180	8,250	70	0.9	1,850	11	Short-Term On-The-Job-Training
43-4081	Hotel, Motel, & Resort Desk Clerks	3,650	4,500	850	23.3	1,270	11	Short-Term On-The-Job-Training
43-4111	Interviewers, Except Eligibility & Loan	5,010	5,910	900	18.0	810	11	Short-Term On-The-Job-Training
43-4121	Library Assistants, Clerical	1,740	1,990	250	14.4	590	11	Short-Term On-The-Job-Training
43-4131	Loan Interviewers & Clerks	3,760	3,270	-490	-13.0	160	11	Short-Term On-The-Job-Training
43-4141	New Accounts Clerks	3,680	3,870	190	5.2	560	8	Work Experience
43-4151	Order Clerks	17,790	15,230	-2,560	-14.4	2,420	11	Short-Term On-The-Job-Training
43-4161	Human Resources Assist, Ex Pay & Timekeepers	5,940	6,630	690	11.6	1,000	11	Short-Term On-The-Job-Training
43-4171	Receptionists & Information Clerks	30,030	33,210	3,180	10.6	4,910	11	Short-Term On-The-Job-Training
43-4181	Reservation & Trans Ticket Agents & Travel Clerks	8,490	9,170	680	8.0	1,680	11	Short-Term On-The-Job-Training
43-4999	Financial, Information, & Record Clerks, All Other	8,330	9,630	1,300	15.6	820	11	Short-Term On-The-Job-Training
43-5011	Cargo & Freight Agents	4,620	4,810	190	4.1	660	10	Moderate-Term On-The-Job-Training
43-5021	Couriers & Messengers	7,160	6,900	-260	-3.6	1,360	11	Short-Term On-The-Job-Training
43-5031	Police, Fire, & Ambulance Dispatchers	740	820	80	10.8	90	10	Moderate-Term On-The-Job-Training
43-5032	Dispatchers, Except Police, Fire, & Ambulance	6,500	7,370	870	13.4	790	10	Moderate-Term On-The-Job-Training
43-5041	Meter Readers, Utilities	950	740	-210	-22.1	140	11	Short-Term On-The-Job-Training
43-5051	Postal Service Clerks	2,500	2,440	-60	-2.4	370	11	Short-Term On-The-Job-Training
43-5052	Postal Service Mail Carriers	11,160	10,900	-260	-2.3	2,320	11	Short-Term On-The-Job-Training
43-5053	Postal Serv Mail Sort, Processors, & Processing	7,030	6,870	-160	-2.3	1,040	11	Short-Term On-The-Job-Training
43-5061	Production, Planning, & Expediting Clerks	23,830	25,320	1,490	6.3	2,830	11	Short-Term On-The-Job-Training
43-5071	Shipping, Receiving, & Traffic Clerks	41,560	43,180	1,620	3.9	5,940	11	Short-Term On-The-Job-Training
43-5081	Stock Clerks & Order Fillers	55,700	58,550	2,850	5.1	15,070	11	Short-Term On-The-Job-Training
43-5111	Weigh, Measure, Check, & Sample, Recordkeeping	1,940	2,120	180	9.3	350	11	Short-Term On-The-Job-Training
43-6011	Executive Secretaries & Administrative Assistants	62,870	67,000	4,130	6.6	7,600	10	Moderate-Term On-The-Job-Training
43-6012	Legal Secretaries	17,150	18,290	1,140	6.6	2,080	7	Post-Secondary Vocational Education
43-6013	Medical Secretaries	14,340	14,390	50	0.3	1,680	7	Post-Secondary Vocational Education
43-6014	Secretaries, Except Legal, Medical, & Executive	36,060	35,590	-470	-1.3	4,190	10	Moderate-Term On-The-Job-Training

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		2001 <sup>3</sup>	2008	Number	Percent			
43-9011	Computer Operators	6,200	5,300	-900	-14.5	710	10	Moderate-Term On-The-Job-Training
43-9021	Data Entry Keyers	16,540	16,120	-420	-2.5	1,790	10	Moderate-Term On-The-Job-Training
43-9022	Word Processors & Typists	14,030	12,120	-1,910	-13.6	1,840	10	Moderate-Term On-The-Job-Training
43-9031	Desktop Publishers	1,080	1,500	420	38.9	160	7	Post-Secondary Vocational Education
43-9041	Insurance Claims & Policy Processing Clerks	9,980	9,640	-340	-3.4	1,160	10	Moderate-Term On-The-Job-Training
43-9051	Mail Clerks & Mail Mach Ops, Ex Postal Service	5,930	6,270	340	5.7	1,270	11	Short-Term On-The-Job-Training
43-9061	Office Clerks, General	107,130	115,590	8,460	7.9	15,010	11	Short-Term On-The-Job-Training
43-9071	Office Machine Operators, Except Computer	2,520	2,200	-320	-12.7	590	11	Short-Term On-The-Job-Training
43-9081	Proofreaders & Copy Markers	810	800	-10	-1.2	210	11	Short-Term On-The-Job-Training
43-9111	Statistical Assistants	1,290	1,330	40	3.1	80	10	Moderate-Term On-The-Job-Training
43-9199	Office & Administrative Support Workers, All Other	32,520	32,580	60	0.2	3,860	10	Moderate-Term On-The-Job-Training
<b>45-0000</b>	<b>Farming, Fishing, &amp; Forestry Occupations</b>	<b>2,940</b>	<b>3,260</b>	<b>320</b>	<b>10.9</b>	<b>410</b>		
45-1011	First-Line Sups/Mgrs of Farm, Fish, & Forest Wrkrs	130	150	20	15.4	30	8	Work Experience
45-2011	Agricultural Inspectors	180	190	10	5.6	30	8	Work Experience
45-2041	Graders & Sorters, Agricultural Products	590	640	50	8.5	100	8	Work Experience
45-2092	Farmworks & Labor, Crop, Nursery, & Greenhouse	980	1,120	140	14.3	120	11	Short-Term On-The-Job-Training
45-2093	Farmworkers, Farm & Ranch Animals	350	390	40	11.4	40	11	Short-Term On-The-Job-Training
45-4011	Forest & Conservation Workers	250	260	10	4.0	40	10	Moderate-Term On-The-Job-Training
45-9099	Farming, Fishing, & Forestry Workers, All Other	450	500	50	11.1	50	10	Moderate-Term On-The-Job-Training
<b>47-0000</b>	<b>Construction &amp; Extraction Occupations</b>	<b>129,810</b>	<b>153,060</b>	<b>23,250</b>	<b>17.9</b>	<b>19,280</b>		
47-1011	First-Line Sups/Mgrs of Construction Trades	7,280	8,580	1,300	17.9	1,250	8	Work Experience
47-2011	Boilermakers	130	130	0	0.0	20	9	Long-Term On-The-Job-Training
47-2021	Brickmasons & Blockmasons	1,120	1,410	290	25.9	160	9	Long-Term On-The-Job-Training

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		2001 <sup>3</sup>	2008	Number	Percent			
47-2031	Carpenters	16,340	19,950	3,110	18.5	2,150	9	Long-Term On-The-Job-Training
47-2041	Carpet Installers	2,280	2,500	220	9.6	280	10	Moderate-Term On-The-Job-Training
47-2042	Floor Layers, Except Carpet, Wood, & Hard Tiles	770	920	150	19.5	100	10	Moderate-Term On-The-Job-Training
47-2043	Floor Sanders & Finishers	460	560	100	21.7	60	10	Moderate-Term On-The-Job-Training
47-2044	Tile & Marble Setters	720	850	130	18.1	90	9	Long-Term On-The-Job-Training
47-2051	Cement Masons & Concrete Finishers	8,610	10,370	1,760	20.4	560	9	Long-Term On-The-Job-Training
47-2053	Terrazzo Workers & Finishers	550	600	50	9.1	30	9	Long-Term On-The-Job-Training
47-2061	Construction Laborers	12,790	15,570	2,780	21.7	890	10	Moderate-Term On-The-Job-Training
47-2071	Paving, Surfacing, & Tamping Equipment Operator	790	910	120	15.2	110	10	Moderate-Term On-The-Job-Training
47-2072	Pile-Driver Operators	130	150	20	15.4	20	10	Moderate-Term On-The-Job-Training
47-2073	Operating Engineers & Oth Const Equipment Ops	3,020	3,340	320	10.6	480	10	Moderate-Term On-The-Job-Training
47-2081	Drywall & Ceiling Tile Installers	5,780	7,030	1,250	21.6	420	10	Moderate-Term On-The-Job-Training
47-2082	Tapers	1,680	2,010	330	19.6	120	10	Moderate-Term On-The-Job-Training
47-2111	Electricians	13,570	16,420	2,850	21.0	1,940	9	Long-Term On-The-Job-Training
47-2121	Glaziers	400	470	70	17.5	60	9	Long-Term On-The-Job-Training
47-2130	Insulation Workers	630	750	120	19.0	*		
47-2141	Painters, Construction & Maintenance	7,790	9,200	1,410	18.1	1,040	10	Moderate-Term On-The-Job-Training
47-2142	Paperhangers	110	140	30	27.3	20	10	Moderate-Term On-The-Job-Training
47-2151	Pipelayers	510	580	70	13.7	60	10	Moderate-Term On-The-Job-Training
47-2152	Plumbers, Pipefitters, & Steamfitters	10,920	12,620	1,700	15.6	1,340	9	Long-Term On-The-Job-Training
47-2161	Plasterers & Stucco Masons	3,620	4,280	660	18.2	510	9	Long-Term On-The-Job-Training
47-2171	Reinforcing Iron & Rebar Workers	850	1,010	160	18.8	70	9	Long-Term On-The-Job-Training
47-2181	Roofers	2,840	3,350	510	18.0	490	10	Moderate-Term On-The-Job-Training
47-2211	Sheet Metal Workers	3,840	4,170	330	8.6	580	10	Moderate-Term On-The-Job-Training
47-2221	Structural Iron & Steel Workers	1,460	1,740	280	19.2	120	9	Long-Term On-The-Job-Training
47-3011	Helpers--Brick, Block, Stonemasons, & Tile & Marble	1,070	1,280	210	19.6	410	11	Short-Term On-The-Job-Training
47-3012	Helpers--Carpenters	1,910	2,230	320	16.8	720	11	Short-Term On-The-Job-Training
47-3013	Helpers--Electricians	1,990	2,360	370	18.6	760	11	Short-Term On-The-Job-Training
47-3014	Helpers--Paint, Paperhanger, Plaster, & Stucco	2,620	3,110	490	18.7	1,000	11	Short-Term On-The-Job-Training
47-3015	Helpers--Plumber, Pipefitter, & Steamfitters	1,890	2,220	330	17.5	710	11	Short-Term On-The-Job-Training
47-3016	Helpers--Roofers	560	670	110	19.6	210	11	Short-Term On-The-Job-Training
47-3019	Helpers, Construction Trades, All Other	1,080	1,350	270	25.0	420	11	Short-Term On-The-Job-Training
47-4011	Construction & Building Inspectors	1,340	1,530	190	14.2	230	8	Work Experience

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		2001 <sup>3</sup>	2008	Number	Percent			
47-4021	Elevator Installers & Repairers	1,180	1,390	210	17.8	290	9	Long-Term On-The-Job-Training
47-4031	Fence Erectors	1,890	2,090	200	10.6	240	10	Moderate-Term On-The-Job-Training
47-4041	Hazardous Materials Removal Workers	850	930	80	9.4	190	10	Moderate-Term On-The-Job-Training
47-4051	Highway Maintenance Workers	260	260	0	0.0	30	10	Moderate-Term On-The-Job-Training
47-4099	Construction & Related Workers, All Other	2,510	2,990	480	19.1	830	10	Moderate-Term On-The-Job-Training
47-5011	Derrick Operators, Oil & Gas	170	150	-20	-11.8	40	10	Moderate-Term On-The-Job-Training
47-5012	Rotary Drill Operators, Oil & Gas	190	160	-30	-15.8	40	10	Moderate-Term On-The-Job-Training
47-5013	Service Unit Operators, Oil, Gas, & Mining	100	80	-20	-20.0	20	10	Moderate-Term On-The-Job-Training
47-5071	Roustabouts, Oil & Gas	440	370	-70	-15.9	100	10	Moderate-Term On-The-Job-Training
47-5081	Helpers--Extraction Workers	100	110	10	10.0	30	11	Short-Term On-The-Job-Training
47-5099	Extraction Workers, All Other	170	170	0	0.0	40	10	Moderate-Term On-The-Job-Training
<b>49-0000</b>	<b>Installation, Maintenance, &amp; Repair Occupations</b>		<b>141,390</b>	<b>152,270</b>	<b>10,880</b>	<b>7.7</b>	<b>21,670</b>	
49-1011	First-Line Sups/Mgrs of Mechanics, Installer	9,560	10,570	1,010	10.6	1,800	8	Work Experience
49-2011	Computer, Automated Teller, & Office Mach Repairers	2,910	2,960	50	1.7	220	7	Post-Secondary Vocational Education
49-2021	Radio Mechanics	100	90	-10	-10.0	10	7	Post-Secondary Vocational Education
49-2022	Telecomm Equip Install & Repair, Ex Line Installers	9,690	9,760	70	0.7	1,250	7	Post-Secondary Vocational Education
49-2091	Avionics Technicians	630	600	-30	-4.8	90	7	Post-Secondary Vocational Education
49-2092	Electric Motor, Power Tool, & Related Repairers	1,850	1,960	110	5.9	300	7	Post-Secondary Vocational Education
49-2093	Electrical & Electronics Install & Repair, Trans Equip	850	850	0	0.0	110	7	Post-Secondary Vocational Education
49-2094	Electrical & Electronics Repair, Comm & Industrial Equip	1,760	1,820	60	3.4	250	7	Post-Secondary Vocational Education
49-2096	Electronic Equip Install & Repair, Motor Vehicles	730	790	60	8.2	120	7	Post-Secondary Vocational Education
49-2097	Electronic Home Entertainment Equip Install & Repairers	480	420	-60	-12.5	60	7	Post-Secondary Vocational Education
49-2098	Security & Fire Alarm Systems Installers	4,680	6,230	1,550	33.1	700	7	Post-Secondary Vocational Education
49-2099	Electrical & Electronic Equip Mechs, Installers	380	420	40	10.5	60	7	Post-Secondary Vocational Education
49-3011	Aircraft Mechanics & Service Technicians	4,280	4,370	90	2.1	630	7	Post-Secondary Vocational Education
49-3021	Automotive Body & Related Repairers	3,660	3,880	220	6.0	650	9	Long-Term On-The-Job-Training
49-3022	Automotive Glass Installers & Repairers	950	970	20	2.1	170	9	Long-Term On-The-Job-Training
49-3023	Automotive Service Technicians & Mechanics	21,930	24,250	2,320	10.6	3,790	7	Post-Secondary Vocational Education
49-3031	Bus & Truck Mechs & Diesel Engine Specialists	5,700	6,380	680	11.9	1,080	7	Post-Secondary Vocational Education

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49-3042	Mobile Heavy Equip Mechanics, Except Engines	2,100	2,440	340	16.2	410	7	Post-Secondary Vocational Education
49-3052	Motorcycle Mechanics	240	240	0	0.0	40	9	Long-Term On-The-Job-Training
49-3053	Outdoor Power Equip & Other Small Eng Mechanics	230	230	0	0.0	40	10	Moderate-Term On-The-Job-Training
49-3091	Bicycle Repairers	440	490	50	11.4	130	10	Moderate-Term On-The-Job-Training
49-3092	Recreational Vehicle Service Technicians	120	130	10	8.3	30	9	Long-Term On-The-Job-Training
49-3093	Tire Repairers & Changers	1,460	1,460	0	0.0	400	11	Short-Term On-The-Job-Training
49-9012	Control & Valve Installers & Repairers, Ex Mechanics	1,070	1,100	30	2.8	250	10	Moderate-Term On-The-Job-Training
49-9021	Heating, Air Conditioning, & Refrigeration Mechanics	2,570	3,010	440	17.1	200	9	Long-Term On-The-Job-Training
49-9031	Home Appliance Repairers	1,190	1,380	190	16.0	180	9	Long-Term On-The-Job-Training
49-9041	Industrial Machinery Mechanics	3,350	3,580	230	6.9	650	9	Long-Term On-The-Job-Training
49-9042	Maintenance & Repair Workers, General	36,430	37,530	1,100	3.0	3,290	9	Long-Term On-The-Job-Training
49-9043	Maintenance Workers, Machinery	1,650	1,660	10	0.6	310	9	Long-Term On-The-Job-Training
49-9044	Millwrights	900	910	10	1.1	190	9	Long-Term On-The-Job-Training
49-9051	Electrical Power-Line Installers & Repairers	400	420	20	5.0	90	9	Long-Term On-The-Job-Training
49-9052	Telecommunications Line Installers & Repairers	4,470	5,080	610	13.6	620	9	Long-Term On-The-Job-Training
49-9061	Camera & Photographic Equipment Repairers	390	370	-20	-5.1	70	10	Moderate-Term On-The-Job-Training
49-9062	Medical Equipment Repairers	1,080	1,240	160	14.8	200	10	Moderate-Term On-The-Job-Training
49-9063	Musical Instrument Repairers & Tuners	460	480	20	4.3	80	9	Long-Term On-The-Job-Training
49-9064	Watch Repairers	170	190	20	11.8	30	9	Long-Term On-The-Job-Training
49-9069	Precision Instrument & Equip Repairers, All Other	220	230	10	4.5	40	9	Long-Term On-The-Job-Training
49-9091	Coin, Vend, & Amusement Mach Servicers & Repairers	230	250	20	8.7	40	10	Moderate-Term On-The-Job-Training
49-9094	Locksmiths & Safe Repairers	430	450	20	4.7	100	10	Moderate-Term On-The-Job-Training
49-9096	Riggers	310	350	40	12.9	50	11	Short-Term On-The-Job-Training
49-9098	Helpers--Installation, Maint, & Repair Workers	4,450	4,920	470	10.6	1,680	11	Short-Term On-The-Job-Training
49-9099	Installation, Maint, & Repair Workers, All Other	6,890	7,810	920	13.4	1,260	9	Long-Term On-The-Job-Training
<b>51-0000</b>	<b>Production Occupations</b>	<b>425,760</b>	<b>425,740</b>	<b>-20</b>	<b>-0.0</b>	<b>64,050</b>		
51-1011	First-Line Sups/Mgrs of Prod & Operating Wkrs	25,290	24,570	-720	-2.8	4,570	8	Work Experience
51-2011	Aircraft Struct, Surfaces, Rigging, & Systems Assemblers	3,690	3,220	-470	-12.7	630	9	Long-Term On-The-Job-Training
51-2021	Coil Winders, Tapers, & Finishers	1,710	1,590	-120	-7.0	290	11	Short-Term On-The-Job-Training

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51-2022	Electrical & Electronic Equipment Assemblers	9,810	8,260	-1,550	-15.8	1,610	11	Short-Term On-The-Job-Training
51-2023	Electromechanical Equipment Assemblers	2,260	2,120	-140	-6.2	390	11	Short-Term On-The-Job-Training
51-2031	Engine & Other Machine Assemblers	650	610	-40	-6.2	90	11	Short-Term On-The-Job-Training
51-2041	Structural Metal Fabricators & Fitters	2,080	2,230	150	7.2	230	10	Moderate-Term On-The-Job-Training
51-2091	Fiberglass Laminators & Fabricators	1,020	990	-30	-2.9	120	10	Moderate-Term On-The-Job-Training
51-2092	Team Assemblers	37,610	37,480	-130	-0.3	4,540	10	Moderate-Term On-The-Job-Training
51-2093	Timing Device Assemblers, Adjusters, & Calibrators	170	160	-10	-5.9	20	10	Moderate-Term On-The-Job-Training
51-2099	Assemblers & Fabricators, All Other	9,880	10,930	1,050	10.6	1,260	10	Moderate-Term On-The-Job-Training
51-3011	Bakers	4,270	4,780	510	11.9	490	9	Long-Term On-The-Job-Training
51-3021	Butchers & Meat Cutters	3,420	3,320	-100	-2.9	580	9	Long-Term On-The-Job-Training
51-3022	Meat, Poultry, & Fish Cutters & Trimmers	4,220	4,670	450	10.7	760	11	Short-Term On-The-Job-Training
51-3023	Slaughterers & Meat Packers	670	720	50	7.5	120	10	Moderate-Term On-The-Job-Training
51-3091	Food & Tobac Roast, Bake, & Dry Mach Ops & Tenders	880	880	0	0.0	150	11	Short-Term On-The-Job-Training
51-3092	Food Batchmakers	2,320	2,500	180	7.8	410	11	Short-Term On-The-Job-Training
51-3093	Food Cooking Machine Operators & Tenders	1,300	1,420	120	9.2	160	11	Short-Term On-The-Job-Training
51-3099	Food Processing Workers, All Other	2,570	2,530	-40	-1.6	430	11	Short-Term On-The-Job-Training
51-4011	Comp-Controlled Mach Tool Ops, Metal & Plastic	4,400	4,400	0	0.0	1,100	9	Long-Term On-The-Job-Training
51-4012	Numerical Tool & Process Control Programmers	540	540	0	0.0	130	9	Long-Term On-The-Job-Training
51-4021	Extrud & Draw Mach Setters, Ops, & Tends, Metl	3,040	3,090	50	1.6	470	10	Moderate-Term On-The-Job-Training
51-4022	Forging Mach Setters, Ops, & Tends, Metal & Plastic	730	690	-40	-5.5	160	10	Moderate-Term On-The-Job-Training
51-4023	Rolling Mach Setters, Ops, & Tends, Metal & Plastic	1,290	1,310	20	1.6	300	10	Moderate-Term On-The-Job-Training
51-4031	Cutting, Punching, & Press Machine Setters, Ops	9,150	8,120	-1,030	-11.3	1,170	10	Moderate-Term On-The-Job-Training
51-4032	Drill & Bore Mach Tool Set, Ops, & Tend, Metal	1,980	1,730	-250	-12.6	420	10	Moderate-Term On-The-Job-Training
51-4033	Grind, Lap, Polish, & Buff Mach Tool Set, Ops,	6,130	5,870	-260	-4.2	1,030	10	Moderate-Term On-The-Job-Training
51-4034	Lathe & Turn Mach Tool Set, Ops, & Tend, Metl & Plastic	2,570	2,220	-350	-13.6	660	10	Moderate-Term On-The-Job-Training
51-4035	Mill & Plan Mach Set, Ops, & Tend, Metal & Plastic	1,130	990	-140	-12.4	240	10	Moderate-Term On-The-Job-Training
51-4041	Machinists	13,890	13,460	-430	-3.1	1,950	9	Long-Term On-The-Job-Training
51-4051	Metal-Refining Furnace Operators & Tenders	320	310	-10	-3.1	60	10	Moderate-Term On-The-Job-Training
51-4052	Pourers & Casters, Metal	310	290	-20	-6.5	60	10	Moderate-Term On-The-Job-Training
51-4061	Model Makers, Metal & Plastic	420	360	-60	-14.3	70	10	Moderate-Term On-The-Job-Training
51-4062	Patternmakers, Metal & Plastic	510	420	-90	-17.6	90	10	Moderate-Term On-The-Job-Training
51-4071	Foundry Mold & Coremakers	1,320	1,050	-270	-20.5	170	10	Moderate-Term On-The-Job-Training
51-4072	Mold, Core, & Cast Mach, Set, Ops & Tend, Metl	5,360	5,250	-110	-2.1	750	10	Moderate-Term On-The-Job-Training

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Percent		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
51-4081	Mult Mach Tool Set, Ops, & Tend, Metal & Plastic	2,490	2,480	-10	-0.4	260	10	Moderate-Term On-The-Job-Training
51-4111	Tool & Die Makers	2,380	2,260	-120	-5.0	400	9	Long-Term On-The-Job-Training
51-4121	Welders, Cutters, Solderers, & Brazers	9,810	10,730	920	9.4	2,010	7	Post-Secondary Vocational Education
51-4122	Weld, Solder, & Braze Mach Setters, Ops, & Tenders	1,300	1,350	50	3.8	260	10	Moderate-Term On-The-Job-Training
51-4191	Heat Treat Equip Set, Ops, & Tend, Metal & Plastic	1,310	1,340	30	2.3	190	10	Moderate-Term On-The-Job-Training
51-4192	Lay-Out Workers, Metal & Plastic	360	320	-40	-11.1	60	10	Moderate-Term On-The-Job-Training
51-4193	Plate & Coat Mach Set, Ops, & Tend, Metal & Plastic	2,130	2,090	-40	-1.9	300	10	Moderate-Term On-The-Job-Training
51-4194	Tool Grinders, Filers, & Sharpeners	1,040	900	-140	-13.5	180	10	Moderate-Term On-The-Job-Training
51-4199	Metal Workers & Plastic Workers, All Other	2,860	3,000	140	4.9	390	10	Moderate-Term On-The-Job-Training
51-5011	Bindery Workers	3,070	3,280	210	6.8	580	10	Moderate-Term On-The-Job-Training
51-5012	Bookbinders	420	450	30	7.1	80	10	Moderate-Term On-The-Job-Training
51-5021	Job Printers	2,150	2,290	140	6.5	390	9	Long-Term On-The-Job-Training
51-5022	Prepress Technicians & Workers	3,460	3,130	-330	-9.5	560	9	Long-Term On-The-Job-Training
51-5023	Printing Machine Operators	7,100	7,510	410	5.8	1,280	10	Moderate-Term On-The-Job-Training
51-5099	Printing Workers, All Other	840	920	80	9.5	160	10	Moderate-Term On-The-Job-Training
51-6011	Laundry & Dry-Cleaning Workers	5,960	6,610	650	10.9	1,170	10	Moderate-Term On-The-Job-Training
51-6021	Pressers, Textile, Garment, & Related Materials	5,440	5,810	370	6.8	540	11	Short-Term On-The-Job-Training
51-6031	Sewing Machine Operators	52,370	48,970	-3,400	-6.5	3,700	10	Moderate-Term On-The-Job-Training
51-6041	Shoe & Leather Workers & Repairers	620	580	-40	-6.5	170	9	Long-Term On-The-Job-Training
51-6042	Shoe Machine Operators & Tenders	110	90	-20	-18.2	10	10	Moderate-Term On-The-Job-Training
51-6051	Sewers, Hand	5,290	5,760	470	8.9	850	11	Short-Term On-The-Job-Training
51-6052	Tailors, Dressmakers, & Custom Sewers	1,460	1,500	40	2.7	230	8	Work Experience
51-6061	Textile Bleaching & Dyeing Mach Ops & Tenders	3,190	3,400	210	6.6	450	10	Moderate-Term On-The-Job-Training
51-6062	Textile Cutting Machine Setters, Ops, & Tenders	3,320	3,150	-170	-5.1	390	10	Moderate-Term On-The-Job-Training
51-6063	Textile Knit & Weave Mach Setters, Ops & Tenders	2,810	3,000	190	6.8	320	9	Long-Term On-The-Job-Training
51-6064	Textile Wind, Twist, & Draw Out Mach Set, Ops & Tender	1,010	1,060	50	5.0	160	10	Moderate-Term On-The-Job-Training
51-6091	Extrude & Form Mach Setters, Ops, & Tenders	470	500	30	6.4	90	10	Moderate-Term On-The-Job-Training
51-6092	Fabric & Apparel Patternmakers	2,700	2,730	30	1.1	600	9	Long-Term On-The-Job-Training
51-6093	Upholsterers	2,770	2,650	-120	-4.3	620	9	Long-Term On-The-Job-Training
51-6099	Textile, Apparel, & Furnishings Workers, All Other	5,760	6,710	950	16.5	880	10	Moderate-Term On-The-Job-Training
51-7011	Cabinetmakers & Bench Carpenters	6,480	6,640	160	2.5	1,470	9	Long-Term On-The-Job-Training
51-7021	Furniture Finishers	1,480	1,610	130	8.8	430	9	Long-Term On-The-Job-Training

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Percent		Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008	Number	Percent			
51-7031	Model Makers, Wood	150	170	20	13.3	50	9	Long-Term On-The-Job-Training
51-7032	Patternmakers, Wood	100	110	10	10.0	30	9	Long-Term On-The-Job-Training
51-7041	Sawing Mach Setters, Ops. & Tenders, Wood	550	580	30	5.5	160	10	Moderate-Term On-The-Job-Training
51-7042	Woodwork Mach Setters, Ops. & Tenders, Ex Sawing	2,660	2,640	-20	-0.8	760	10	Moderate-Term On-The-Job-Training
51-7099	Woodworkers, All Other	1,010	1,120	110	10.9	310	10	Moderate-Term On-The-Job-Training
51-8012	Power Distributors & Dispatchers	150	150	0	0.0	30	9	Long-Term On-The-Job-Training
51-8013	Power Plant Operators	840	890	50	6.0	180	9	Long-Term On-The-Job-Training
51-8021	Stationary Engineers & Boiler Operators	1,460	1,460	0	0.0	280	9	Long-Term On-The-Job-Training
51-8031	Water & Liquid Waste Treatment Plant & System Ops	1,310	1,420	110	8.4	300	9	Long-Term On-The-Job-Training
51-8091	Chemical Plant & System Operators	610	660	50	8.2	140	9	Long-Term On-The-Job-Training
51-8092	Gas Plant Operators	280	280	0	0.0	60	9	Long-Term On-The-Job-Training
51-8093	Petrol Pump System Ops, Refinery Ops, & Gaugers	2,170	1,930	-240	-11.1	430	9	Long-Term On-The-Job-Training
51-8099	Plant & System Operators, All Other	440	460	20	4.5	100	9	Long-Term On-The-Job-Training
51-9011	Chemical Equipment Operators & Tenders	1,120	1,250	130	11.6	190	10	Moderate-Term On-The-Job-Training
51-9012	Separate, Filter, Clarify, Precipitate, & Still	1,140	1,330	190	16.7	200	10	Moderate-Term On-The-Job-Training
51-9021	Crushing, Grinding, & Polishing Mach Setters, Ops & Ten	810	880	70	8.6	130	10	Moderate-Term On-The-Job-Training
51-9022	Grinding & Polishing Workers, Hand	2,290	2,370	80	3.5	350	10	Moderate-Term On-The-Job-Training
51-9023	Mix & Blend Mach Setters, Ops. & Tenders	2,900	3,180	280	9.7	460	10	Moderate-Term On-The-Job-Training
51-9031	Cutters & Trimmers, Hand	2,560	2,530	-30	-1.2	320	11	Short-Term On-The-Job-Training
51-9032	Cutting & Slicing Mach Setters, Ops. & Tenders	2,280	2,300	20	0.9	280	10	Moderate-Term On-The-Job-Training
51-9041	Extrude, Form, Press, & Compact Mach Set, Ops, Tenders	2,050	2,110	60	2.9	330	10	Moderate-Term On-The-Job-Training
51-9051	Furnace, Kiln, Oven, Drier, & Kettle Ops & Tenders	520	530	10	1.9	100	10	Moderate-Term On-The-Job-Training
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	23,380	22,060	-1,320	-5.6	3,490	10	Moderate-Term On-The-Job-Training
51-9071	Jewelers & Precious Stone & Metal Workers	1,900	2,210	310	16.3	370	7	Post-Secondary Vocational Education
51-9081	Dental Laboratory Technicians	610	580	-30	-4.9	110	9	Long-Term On-The-Job-Training
51-9082	Medical Appliance Technicians	570	660	90	15.8	120	9	Long-Term On-The-Job-Training
51-9083	Ophthalmic Laboratory Technicians	370	410	40	10.8	70	10	Moderate-Term On-The-Job-Training
51-9111	Packaging & Filling Machine Operators & Tenders	12,210	13,530	1,320	10.8	1,990	11	Short-Term On-The-Job-Training
51-9121	Coat, Paint, & Spray Mach Set, Ops & Tenders	2,650	2,690	40	1.5	410	10	Moderate-Term On-The-Job-Training
51-9122	Painters, Transportation Equipment	860	890	30	3.5	140	10	Moderate-Term On-The-Job-Training
51-9123	Painting, Coating, & Decorating Workers	2,090	2,190	100	4.8	330	11	Short-Term On-The-Job-Training
51-9131	Photographic Process Workers	720	700	-20	-2.8	130	10	Moderate-Term On-The-Job-Training
51-9132	Photographic Processing Machine Operators	1,650	1,800	150	9.1	310	11	Short-Term On-The-Job-Training

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Percent	Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008				
51-9141	Semiconductor Processors	2,440	2,250	-190	-7.8	280	6 Associate Degree
51-9191	Cementing & Gluing Machine Operators & Tenders	1,260	1,220	-40	-3.2	200	10 Moderate-Term On-The-Job-Training
51-9192	Clean, Wash, & Metal Pickling Equip Ops & Tenders	710	630	-80	-11.3	110	10 Moderate-Term On-The-Job-Training
51-9194	Etchers & Engravers	190	200	10	5.3	30	9 Long-Term On-The-Job-Training
51-9195	Molders, Shapers, & Casters, Except Metal & Plastic	620	640	20	3.2	120	10 Moderate-Term On-The-Job-Training
51-9196	Paper Goods Machine Setters, Ops, & Tenders	3,770	3,530	-240	-6.4	490	10 Moderate-Term On-The-Job-Training
51-9198	Helpers-Production Workers	19,460	20,270	810	4.2	3,500	11 Short-Term On-The-Job-Training
51-9199	Production Workers, All Other	14,030	15,030	1,000	7.1	1,800	10 Moderate-Term On-The-Job-Training
<b>53-0000</b>	<b>Transportation &amp; Material Moving Occupations</b>		<b>335,240</b>	<b>370,250</b>	<b>35,010</b>	<b>10.4</b>	<b>61,100</b>
	Aircraft Cargo Handling Supervisors	370	400	30	8.1	60	8 Work Experience
	First-Line Sups/Mgrs of Help, Labor, & Mat Movers	4,710	5,250	540	11.5	730	8 Work Experience
	First-Line Sups/Mgrs of Trans & Mat-Moving Machine	7,030	8,210	1,180	16.8	1,120	8 Work Experience
	Airline Pilots, Copilots, & Flight Engineers	3,460	3,410	-50	-1.4	540	5 Bachelor's Degree
	Commercial Pilots	680	800	120	17.6	120	7 Post-Secondary Vocational Education
	Air Traffic Controllers	650	690	40	6.2	200	9 Long-Term On-The-Job-Training
	Airfield Operations Specialists	200	220	20	10.0	60	11 Short-Term On-The-Job-Training
	Air Transportation Workers, All Other	510	590	80	15.7	170	10 Moderate-Term On-The-Job-Training
	Ambulance Drivers & Attendants, Ex EMTs	310	360	50	16.1	20	10 Moderate-Term On-The-Job-Training
	Bus Drivers, Transit & Intercity	8,470	9,460	990	11.7	1,590	10 Moderate-Term On-The-Job-Training
	Bus Drivers, School	7,000	7,740	740	10.6	1,310	11 Short-Term On-The-Job-Training
	Driver/Sales Workers	16,650	18,120	1,470	8.8	1,650	11 Short-Term On-The-Job-Training
	Truck Drivers, Heavy & Tractor-Trailer	28,750	33,320	4,570	15.9	2,940	10 Moderate-Term On-The-Job-Training
	Truck Drivers, Light or Delivery Services	37,620	42,420	4,800	12.8	3,790	11 Short-Term On-The-Job-Training
	Taxi Drivers & Chauffeurs	4,210	4,850	640	15.2	250	11 Short-Term On-The-Job-Training
	Motor Vehicle Operators, All Other	4,110	4,500	390	9.5	510	11 Short-Term On-The-Job-Training
	Locomotive Engineers	1,020	1,380	360	35.3	180	8 Work Experience
	Rail Yard Engineers, Dinkey Operators, & Hostlers	220	230	10	4.5	70	8 Work Experience
53-3041	Railroad Brake, Signal, & Switch Operators	360	250	-110	-30.6	100	8 Work Experience
53-4021	Railroad Conductors & Yardmasters	1,140	1,310	170	14.9	380	8 Work Experience

**Table 6: Occupational Employment Projections<sup>1,2</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Employment Change Percent	Openings Due to Separations	BLS Training Level	Education/Experience
		2001 <sup>3</sup>	2008				
53-5011	Sailors & Marine Oilers	560	650	90	16.1	150	11
53-5021	Captains, Mates, & Pilots of Water Vessels	440	510	70	15.9	110	8
53-5022	Motorboat Operators	140	160	20	14.3	40	11
53-5031	Ship Engineers	510	640	130	25.5	140	7
53-5099	Water Transportation Workers, All Other	110	130	20	18.2	30	11
53-6021	Parking Lot Attendants	9,800	10,800	1,000	10.2	1,210	11
53-6031	Service Station Attendants	1,830	1,840	10	0.5	680	11
53-6051	Transportation Inspectors	600	650	50	8.3	110	8
53-6099	Transportation Workers, All Other	3,710	4,500	790	21.3	1,120	11
53-7011	Conveyor Operators & Tenders	4,340	4,750	410	9.4	900	11
53-7021	Crane & Tower Operators	1,350	1,640	290	21.5	310	10
53-7032	Excavating & Loading Machine & Dragline Operators	340	400	60	17.6	80	10
53-7041	Hoist & Winch Operators	310	390	80	25.8	50	10
53-7051	Industrial Truck & Tractor Operators	22,440	24,080	1,640	7.3	2,230	11
53-7061	Cleaners of Vehicles & Equipment	12,680	13,680	1,000	7.9	3,520	11
53-7062	Laborers & Freight, Stock, & Material Movers, Hand	77,780	85,150	7,370	9.5	19,600	11
53-7063	Machine Feeders & Offbearers	19,900	20,180	280	1.4	4,930	11
53-7064	Packers & Packagers, Hand	43,780	48,520	4,740	10.8	8,220	11
53-7072	Pump Operators, Except Wellhead Pumpers	270	270	0	0.0	50	10
53-7081	Refuse & Recyclable Material Collectors	1,990	2,010	20	1.0	640	11
53-7121	Tank Car, Truck, & Ship Loaders	1,680	2,050	370	22.0	370	10
53-7199	Material Moving Workers, All Other	3,210	3,740	530	16.5	820	11
99-9999	Occupation Unknown	240	260	20	8.3	10	

<sup>1</sup>Employment and projections contained in these tables are considered estimates. See introduction for an explanation of data limitations.

<sup>2</sup>Subtotals may not add to the county totals due to the rounding and the suppression of data. Some data are suppressed because of confidentiality, excessive standard error, or other issues.

<sup>3</sup>March 2001 Benchmark.

\*This occupation is a summary occupation. There are no separations currently available for this SOC code. It is anticipated that in the future, this category will be broken out into more detailed occupations.

**Table 7: Occupations with the Most Job Openings<sup>1</sup>**  
**(Growth plus Separations)**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Number of Job Openings	BLS Training Level	Education/Experience
41-2031	Retail Salespersons	45,540	11	Short-Term On-The-Job-Training
41-2011	Cashiers	43,840	11	Short-Term On-The-Job-Training
35-3031	Waiters & Waitresses	33,590	11	Short-Term On-The-Job-Training
35-3021	Comb Food Prep & Serving Wrkrs, Incl Fast Food	31,440	11	Short-Term On-The-Job-Training
53-7062	Laborers & Freight, Stock, & Material Movers, Hand	26,970	11	Short-Term On-The-Job-Training
43-9061	Office Clerks, General	23,470	11	Short-Term On-The-Job-Training
33-9032	Security Guards	22,810	11	Short-Term On-The-Job-Training
25-9041	Teacher Assistants	18,730	11	Short-Term On-The-Job-Training
37-2011	Janitors & Cleaners, Ex Maids & Housekeeping Cleaners	18,160	11	Short-Term On-The-Job-Training
43-5081	Stock Clerks & Order Fillers	17,920	11	Short-Term On-The-Job-Training
29-1111	Registered Nurses	17,790	6	Associate Degree
25-2021	Elementary School Teachers, Except Special Education	14,920	5	Bachelor's Degree
11-1021	General & Operations Managers	14,020	4	Bachelor's or Higher and Some Work Exp.
53-7064	Packers & Packagers, Hand	12,960	11	Short-Term On-The-Job-Training
43-4051	Customer Service Representative	12,950	10	Moderate-Term On-The-Job-Training
43-6011	Executive Secretaries & Administrative Assistants	11,730	10	Moderate-Term On-The-Job-Training
25-2031	Secondary School Teachers, Ex Special and Voc Ed	11,710	5	Bachelor's Degree
35-2014	Cooks, Restaurant	11,560	9	Long-Term On-The-Job-Training
41-4012	Sales Reps, Wholesale & Mfg, Ex Tech & Scientific	11,130	10	Moderate-Term On-The-Job-Training
35-3022	Counter Attends, Cafe, Food Concessions, & Coffee Shop	8,910	11	Short-Term On-The-Job-Training
43-1011	First-Line Sups/Mgrs of Office & Admin Support	8,700	8	Work Experience
53-3033	Truck Drivers, Light or Delivery	8,590	11	Short-Term On-The-Job-Training
43-3031	Bookkeeping, Accounting, & Auditing Clerks	8,420	10	Moderate-Term On-The-Job-Training
35-2021	Food Preparation Workers	8,290	11	Short-Term On-The-Job-Training
43-4171	Receptionists & Information Clerks	8,090	11	Short-Term On-The-Job-Training
41-1011	First-Line Sups/Mgrs of Retail Sales Wrkrs	7,960	8	Work Experience
41-2021	Counter & Rental Clerks	7,880	11	Short-Term On-The-Job-Training
15-1041	Computer Support Specialists	7,880	6	Associate Degree
43-5071	Shipping, Receiving, & Traffic	7,560	11	Short-Term On-The-Job-Training
37-2012	Maids & Housekeeping Cleaners	7,520	11	Short-Term On-The-Job-Training

**Table 7: Occupations with the Most Job Openings<sup>1</sup>**  
**(Growth plus Separations)**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Number of Job Openings	BLS Training Level	Education/Experience
53-3032	Truck Drivers, Heavy & Tractor-Trailer	7,510	10	Moderate-Term On-The-Job-Training
49-3023	Automotive Service Technicians	6,110	7	Post-Secondary Vocational Education
37-3011	Landscaping & Groundskeeping Workers	6,070	11	Short-Term On-The-Job-Training
31-1012	Nursing Aides, Orderlies, & Attendants	6,000	11	Short-Term On-The-Job-Training
27-2011	Actors	5,870	9	Long-Term On-The-Job-Training
15-1031	Computer Software Engineers, Applications	5,740	5	Bachelor's Degree
35-1012	First-Line Sups/Mgrs of Food Prep & Serving Wrkrs	5,640	8	Work Experience
33-3051	Police & Sheriff's Patrol Officers	5,570	9	Long-Term On-The-Job-Training
31-9092	Medical Assistants	5,380	10	Moderate-Term On-The-Job-Training
47-2031	Carpenters	5,260	9	Long-Term On-The-Job-Training
53-7063	Machine Feeders & Offbearers	5,210	11	Short-Term On-The-Job-Training
13-2011	Accountants & Auditors	5,190	5	Bachelor's Degree
15-1071	Network & Computer Systems Administrators	4,900	5	Bachelor's Degree
43-3071	Tellers *	4,850	11	Short-Term On-The-Job-Training
47-2111	Electricians	4,790	9	Long-Term On-The-Job-Training
53-7061	Cleaners of Vehicles & Equipment	4,520	11	Short-Term On-The-Job-Training
51-2092	Team Assemblers *	4,410	10	Moderate-Term On-The-Job-Training
11-1011	Chief Executives	4,410	4	Bachelor's or Higher and Some Work Exp.
11-3031	Financial Managers	4,400	4	Bachelor's or Higher and Some Work Exp.
49-9042	Maintenance & Repair Workers, General	4,390	9	Long-Term On-The-Job-Training
<b>TOTAL OF THESE OCCUPATIONS</b>				<b>597,260</b>

<sup>1</sup>Excludes All Other categories.

\*This occupation appears because of the high number of separations, not growth.

**Table 8: Occupations with Projected Job Loss<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Number of Jobs Lost	Openings due to Separations	BLS Training Level	Education/Experience
		2001 <sup>2</sup>	2008				
51-6031	Sewing Machine Operators	52,370	48,970	-3,400	3,700	10	Moderate-Term On-The-Job-Training
43-4151	Order Clerks	17,790	15,230	-2,560	2,420	11	Short-Term On-The-Job-Training
43-9022	Word Processors & Typists	14,030	12,120	-1,910	1,840	10	Moderate-Term On-The-Job-Training
51-2022	Electrical & Electronic Equipment Assemblers	9,810	8,260	-1,550	1,610	11	Short-Term On-The-Job-Training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	23,380	22,060	-1,320	3,490	10	Moderate-Term On-The-Job-Training
35-9011	Dining Rm & Cafeteria Attendants	21,480	20,250	-1,230	5,110	11	Short-Term On-The-Job-Training
35-9021	Dishwashers	16,260	15,170	-1,090	4,370	11	Short-Term On-The-Job-Training
51-4031	Cutting, Punching, & Press Machine Setters, Ops	9,150	8,120	-1,030	1,170	10	Moderate-Term On-The-Job-Training
43-2011	Switchboard Operators, Including Answering Service	6,880	5,900	-980	1,330	11	Short-Term On-The-Job-Training
43-3071	Tellers	17,310	16,390	-920	5,770	11	Short-Term On-The-Job-Training
43-9011	Computer Operators	6,200	5,300	-900	710	10	Moderate-Term On-The-Job-Training
51-1011	First-Line Sups/Mgrs of Prod & Operating Wrkrs	25,290	24,570	-720	4,570	8	Work Experience
43-4061	Eligibility Interviewers, Government	8,170	7,660	-510	1,600	10	Moderate-Term On-The-Job-Training
43-4131	Loan Interviewers & Clerks	3,760	3,270	-490	160	11	Short-Term On-The-Job-Training
43-6014	Secretaries, Except Legal, Medical	36,060	35,590	-470	4,190	10	Moderate-Term On-The-Job-Training
51-2011	Aircraft Struct, Surfaces, Riggers	3,690	3,220	-470	630	9	Long-Term On-The-Job-Training
51-4041	Machinists	13,890	13,460	-430	1,950	9	Long-Term On-The-Job-Training
43-9021	Data Entry Keyers	16,540	16,120	-420	1,790	10	Moderate-Term On-The-Job-Training
11-9041	Engineering Managers	7,420	7,030	-390	810	4	Bachelor's or Higher and Some Work Exp.
17-2011	Aerospace Engineers	7,150	6,790	-360	1,460	5	Bachelor's Degree
51-4034	Lathe & Turn Mach Tool Set, Ops	2,570	2,220	-350	660	10	Moderate-Term On-The-Job-Training
43-2021	Telephone Operators	1,440	1,090	-350	260	11	Short-Term On-The-Job-Training
43-9041	Insurance Claims & Policy Processing Clerks	9,980	9,640	-340	1,160	10	Moderate-Term On-The-Job-Training
51-5022	Press Technicians & Workers	3,460	3,130	-330	560	9	Long-Term On-The-Job-Training
17-2112	Industrial Engineers	4,860	4,530	-330	540	5	Bachelor's Degree
43-9071	Office Machine Operators, Except Computer	2,520	2,200	-320	590	11	Short-Term On-The-Job-Training
41-2022	Parts Salespersons	5,790	5,480	-310	1,180	10	Moderate-Term On-The-Job-Training
13-1022	Wholesale & Retail Buyers, Except Farm Products	5,650	5,370	-280	1,170	5	Bachelor's Degree
51-4071	Foundry Mold & Coremakers	1,320	1,050	-270	170	10	Moderate-Term On-The-Job-Training
43-5052	Postal Service Mail Carriers	11,160	10,900	-260	2,320	11	Short-Term On-The-Job-Training

**Table 8: Occupations with Projected Job Loss<sup>1</sup>**  
**2001 – 2008**  
**Los Angeles County**

SOC Code	Occupation	Annual Average Employment		Number of Jobs Lost	Openings due to Separations	BLS Training Level	Education/Experience
		2001 <sup>2</sup>	2008				
43-5021	Couriers & Messengers	7,160	6,900	-260	1,360	11	Short-Term On-The-Job-Training
51-4033	Grind, Lap, Polish, & Buff Mach Tool Set, Ops	6,130	5,870	-260	1,030	10	Moderate-Term On-The-Job-Training
51-4032	Drill & Bore Mach Tool Set, Ops	1,980	1,730	-250	420	10	Moderate-Term On-The-Job-Training
43-3021	Billing & Posting Clerks & Machine Operators	13,170	12,930	-240	2,230	11	Short-Term On-The-Job-Training
51-9196	Paper Goods Machine Setters, Ops & Tenders	3,770	3,530	-240	490	10	Moderate-Term On-The-Job-Training
51-8093	Petrol Pump System Ops, Refinery Ops & Gaugers	2,170	1,930	-240	430	9	Long-Term On-The-Job-Training
11-3061	Purchasing Managers	3,470	3,250	-220	730	4	Bachelor's or Higher and Some Work Exp.
43-5041	Meter Readers, Utilities	950	740	-210	140	11	Short-Term On-The-Job-Training
39-3021	Motion Picture Projectionists	1,770	1,580	-190	280	11	Short-Term On-The-Job-Training
51-9141	Semiconductor Processors	2,440	2,250	-190	280	6	Associate Degree
17-3021	Aerospace Engineering & Operations Technicians	1,850	1,670	-180	240	6	Associate Degree
51-6062	Textile Cutting Machine Setters	3,320	3,150	-170	390	10	Moderate-Term On-The-Job-Training
43-5053	Postal Serv Mail Sort, Processors & Processing	7,030	6,870	-160	1,040	11	Short-Term On-The-Job-Training
11-3051	Industrial Production Managers	5,500	5,340	-160	610	5	Bachelor's Degree
43-3061	Procurement Clerks	1,820	1,660	-160	280	11	Short-Term On-The-Job-Training
51-2023	Electromechanical Equipment Assemblers	2,260	2,120	-140	390	11	Short-Term On-The-Job-Training
51-4035	Mill & Plan Mach Set, Ops, & Tend Metal & Plastic	1,130	990	-140	240	10	Moderate-Term On-The-Job-Training
51-4194	Tool Grinders, Filers, & Sharpeners	1,040	900	-140	180	10	Moderate-Term On-The-Job-Training
51-2092	Team Assemblers	37,610	37,480	-130	4,540	10	Moderate-Term On-The-Job-Training
51-6093	Upholsterers	2,770	2,650	-120	620	9	Long-Term On-The-Job-Training
<b>TOTAL OF THESE OCCUPATIONS</b>		<b>472,720</b>	<b>444,630</b>	<b>-28,090</b>	<b>73,210</b>		

<sup>1</sup>Excludes All Other categories.

<sup>2</sup>March 2001 Benchmark.

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## **Appendix**



# **Standard Industrial Classification**

The Standard Industrial Classification (SIC) is a nationally standardized system for identifying and coding business establishments according to their industrial activity. An "establishment" is an economic unit, generally located at a single physical location, where business is conducted or where services or industrial operations are performed. The Standard Industrial Classification (SIC) Manual is the reference guide used to accurately apply and/or understand the classification coding system.

The SIC Manual's format separates industries into ten broad divisions, such as manufacturing and retail trade. Within those broad groupings are more specific two-digit codes, as well as more detailed three-digit and four-digit codes, that identify specific industries. Brief narratives describe the kinds of establishments contained in each classification category.

## **Suggestions for Users**

The SIC Manual facilitates the collection, analysis and publication of information about business establishments. This standardized system is used throughout the United States to promote uniformity in the publications of private and governmental agencies. The Employment Development Department's field office personnel use the manual to assign SIC codes to employers to aid in providing services. Trade associations and private industry use the manual in reference books, such as the California Manufacturers Register.

The manual can help one to understand the composite industries summarized in publications. However, all public sector workers are usually grouped together into a category called "government", which includes federal, state and local government, and state and local education.

The U.S. Department of Labor, Occupational Safety and Health Administration provides SIC information on the Internet at:

**[www.osha.gov](http://www.osha.gov)**

The SIC Manual may be purchased from U.S. Government Bookstores, Bureau of Labor Statistics, or the Superintendent of Documents in Los Angeles or San Francisco. For information about purchasing this manual, contact:

U.S. Government Bookstore  
Marathon Plaza, Room 141-S  
303 2nd Street  
San Francisco, CA 94107  
Phone – (415) 512-2770  
Fax – (415) 512-2776  
<http://access.gpo.go>

# Standard Occupational Classification (SOC)

The Standard Occupational Classification (SOC) 1998 System was developed in response to a growing need for a universal occupational classification system—a system which would allow government agencies and private industry to produce comparable data. The SOC system was designed to cover all occupations in which work is performed for pay or profit and will be used by all federal agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.

Data collected by the 2000 Census of Population will be coded to the 1998 SOC; the Department of Labor's Occupational Information Network (O\*NET), adheres to the 1998 SOC. In fact, all federal government agencies that collect occupational data are expected to adopt the 1998 SOC over the next few years.

## General Characteristics of the Revised SOC

This system classifies workers at four levels of aggregation:

- major group
- minor group
- broad occupation
- detailed occupation

All workers are classified into one of over 820 occupations, according to their occupational definition. To facilitate classification, all occupations are clustered into one of 23 major groups. Within these major groups, there are 96 minor groups, and 449 broad occupations. Each broad occupation includes detailed occupation(s) requiring similar job duties, skills, education, or experience.

The following example shows the hierarchical structure of the 1998 SOC:

19-0000 Life, physical, and social science occupations (*major group*)

19-000 Life scientists (*minor group*)

19-1020 Biological scientists  
(*broad occupation*)

19-1021 Biochemists and biophysicists  
(*detailed occupation*)

19-1022 Microbiologists  
(*detailed occupation*)

19-1023 Zoologists and wildlife biologists  
(*detailed occupation*)

19-1029 Biological scientists, all other  
(*detailed occupation*)

Additional information, updated revision plans, and information on the implementation of the 1998 SOC are available at the Bureau of Labor Statistics (BLS) Internet site:

[www.bls.gov/soc/socguide.htm](http://www.bls.gov/soc/socguide.htm)

# North American Industry Classification System (NAICS)

The United States has a new industry classification system. The North American Industry Classification System (NAICS) will soon replace the U.S. Standard Industrial Classification (SIC) system.

The first-ever North American Industry classification system, NAICS was developed by the U.S., Canada and Mexico to provide comparable statistics across countries. For the first time, government and business analysts will be able to directly compare industrial production statistics collected and published in the North American Free Trade Agreement countries.

NAICS will reshape the way we view our changing economy. It is a unique, all-new system for classifying business establishments. It is the first economic classification system to be constructed based on a single economic concept. Economic units that use like processes to produce goods or services are grouped together. This "production-oriented" system means that statistical agencies in the United States will produce data that can be used for:

- measuring productivity, unit labor costs, and the capital intensity of production;
- constructing input-output relationships and;
- estimating employment-output relationships and other such statistics that require that inputs and outputs be used together.

NAICS responds to increasing and serious criticism about the SIC. NAICS reflects the structure of today's economy in the United States, Canada and Mexico, including the emergence and growth of the service sector and new and advanced technologies. It is a flexible system that allows each country to recognize important industries below the level at which comparable data will be shown for all three countries.

## NAICS-based statistics.

Advance statistics will appear in early 1999. A report in 2000 will show relationships between NAICS and SIC industries. Implementation by Federal agencies will be in phases. Some agency programs will convert to NAICS as early as 1999, others as late as 2004.

## How is NAICS better?

NAICS will make economic statistics more useful. It will improve basic benchmark and current performance statistics, like manufacturers' shipments, retail sales, and service receipts. It will improve statistics by providing an all-new industry classification system that is more:

*Relevant.* NAICS identifies new industries, revises concepts, and reorganizes classifications so that industry-classified statistics highlight businesses that contribute most to our economy.

*Consistent.* NAICS classifies businesses into industries based on one principle instead of several; the principle that businesses using similar production processes are classified together.

*Comparable.* NAICS provides the first-ever comparability in North American industry classifications and economic statistics.

*Flexible.* NAICS classifications will be updated regularly to keep pace with changes in our economy; every 5 years, all three North American countries will review NAICS and make needed revisions.

## How NAICS will affect the data you use.

Every sector of the economy has been restructured and redefined:

- A new *Information* sector combines communications, publishing, motion picture and sound recording, and online services, recognizing our information-based economy.
- *Manufacturing* is restructured to incorporate high-tech industries, with a new subsector devoted to computers and electronics.
- *Retail Trade* is redefined. In addition, eating and drinking places are transferred to the new *Accommodation and Food Services* sector.
- The difference between Retail and Wholesale is now based on how each store conducts business.

For example, many computer stores are reclassified from wholesale to retail.

- Nine new service sectors and 250 new service industries are recognized.

#### **All new numbering system**

Numeric codes for each NAICS classification are completely different from those of the SIC. The new numbering system underscores the “clean slate” approach taken in NAICS and allows its classification changes to be fully developed.

The new system provides five levels of classification (up from four in the SIC), detailed codes that have a maximum of six-digits (up from four in the SIC) and detailed classifications called “U.S. Industry” (instead of “Industry” in the SIC). These changes require new numbers, even for industries that continue without change.

For example, both NAICS and SIC include the detailed industry, “Passenger car rental.” However, in NAICS, it has code number 532111, and in the SIC, it was code number 7514. While all NAICS numeric codes are new, like the SIC, they are organized into multi-level hierarchical classification groups that build up from the detailed industry level.

The additional level of classification and expanded number of digits permit NAICS to account for the increased number of classifications, provide flexibility in structuring industry classification groups, and allow for country-based variations in classification detail.

A variety of resources are available to help users of business statistics understand and use NAICS. Additional information, answers to frequently asked questions, and updated agency implementation plans are available at the Census Bureau's Internet site:

**[www.census.gov/naics](http://www.census.gov/naics)**

Answers to classification and data program inquiries may also be addressed to industry experts at:

**Phone: 1-888-75NAICS**

**Email: [naics@census.gov](mailto:naics@census.gov)**

# Projection Methods and Economic Assumptions

The employment projection process consists of two phases: first, projections for employment by industry are made using both historical data and current information about the economy. Next, the industry projections become a primary source used to project changes in occupational employment.

Changes in occupational employment over time result from two principal sources: industry growth and technological change. In developing occupational employment projections, both of these components must be addressed.

The following is a discussion of how industry and occupational projections are developed, beginning with a description of data sources and followed by a description of the steps involved.

## Principal Data Sources

*Employment by Industry* The source of the official historical industry employment series used for industry projections for the state and each county is the Current Employment Statistics (CES) program. This is a Federal/State cooperative program that compiles monthly estimates of industry employment groupings for the state and each county. These monthly industry employment estimates are based primarily on employer sample surveys.

A second source used in industry forecasts is the Covered Employment and Wage Data, or ES-202 program. Essentially, this program extracts employment and wage information from quarterly tax returns filed by each California employer covered by unemployment insurance. Each employer has been assigned a specific industry and county code and these data are compiled to provide the 'actual' industry employment levels for each industry and county. These data are then used for benchmarking the monthly industry employment estimates made in the CES program. This is also a Federal/State cooperative program.

*Employment by Occupation* Occupational employment estimates are based on survey data collected through the Occupational Employment Statistics (OES) program. The OES survey is an annual mail survey of nonfarm employers conducted by EDD in cooperation with the U.S. Bureau of Labor

Statistics. The survey is based on a sample designed to represent the universe of employers in each state. In California, data are collected for over 800 occupations at the three-digit SIC level of detail. The survey samples approximately 110,000 business establishments over a three year period.

## The Process

*Industry Projections* Industry projections are first developed at aggregated levels (industry groupings) for the state and each county based on the Current Employment Statistics employment series.

Second, these aggregated industry projections are then broken down into more industry specific detail using the ES-202 data. The industry specific projections then become the primary source from which occupational projections are developed by using industry staffing patterns data. The following steps outline the process:

- Approximately every two years, industry employment projections are produced for the nation by the Bureau of Labor Statistics.
- Industry projections are then developed for the state using input from the national forecast and the historical industry employment series for the state.
- County industry projections are then developed using input from the state forecast and the historical employment series for each county.
- State projections are developed for ten years from the base period and county projections are developed for seven years from the base period.
- State forecasts are reviewed by LMID industry analysts, California's Department of Finance, and academics.
- County forecasts are reviewed by local area consultants who provide up-to-date information regarding recent developments in each county not normally accounted for in the model.

**Occupational Projections** The distribution of industry employment by occupation is performed in three steps.

- OES survey responses are summarized by industry and matched with appropriate SIC in the area. (In cases where local OES responses are not available, statewide responses or another area's responses are substituted.)
- The survey data are adjusted to total to the annual average employment level for each industry. This results in estimates of employment by occupation within the three-digit SICs for the base year.
- Finally, base year staffing patterns are adjusted to account for projected shifts in occupational distributions due to technological changes.

These projected changes are derived from special studies conducted by the U.S. Bureau of Labor Statistics. Applying these changes to the base year staffing patterns results in staffing patterns by three-digit SIC for the projected year. Projected year staffing patterns are applied to the industry employment projections to produce occupational employment projections within three-digit SICs. Data by occupation are then summed to get the occupational estimates. The difference between the base year occupation estimates and the projected year projections represents the job growth resulting from industry growth and from technological change. (Change factors do not try to predict regulatory changes.)

Demand for workers is also created by openings that result when workers leave jobs to enter other occupations, retire, or leave the labor force for other reasons. These openings, termed *separations*, are important because, in most occupations, they exceed job openings resulting from employment growth. Even occupations that are projected to decline usually provide job openings due to separations. Separations are developed from separation rates compiled on a national basis every two years by the Bureau Of Labor Statistics.

### Economic Assumptions

The industry and occupational projections in this report are based on the following assumptions:

- The institutional framework of the U.S. economy will not change radically.
- Recent technological and scientific trends will continue.
- The long-term employment patterns will continue in most industries.
- Federal, state, and local government agencies will continue to operate under budgetary constraints.
- No major events, such as war, will occur that will significantly alter the industrial structure of the economy, the occupational staffing patterns, or the rate of long-term growth.
- Population growth rates and age distributions will not differ significantly from Department of Finance projections presently available.
- Attitudes toward work, education, income, and leisure will not change significantly.

## Alphabetical Index of Occupations

OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Accountants & Auditors	56	13-2011
Actors	283	27-2011
Actuaries	82	15-2011
Admin Law Judges, Adjudicators, & Hearing Officers	194	23-1021
Administrative Services Managers	11	11-3011
Adult Literacy, Remedial Ed, & GED Teachers &	252	25-3011
Advertising & Promotions Managers	7	11-2011
Advertising Sales Agents	485	41-3011
Aerospace Engineering & Operations Technicians	117	17-3021
Aerospace Engineers	95	17-2011
Agents & Bus Mgrs of Artists, Performers & Athletes	39	13-1011
Agricultural & Food Science Technicians	163	19-4011
Agricultural & Food Scientists, All Other	131	19-1019
Agricultural Engineers	96	17-2021
Agricultural Equipment Operators	564	45-2091
Agricultural Inspectors	561	45-2011
Agricultural Sciences Teachers, Postsecondary	209	25-1041
Agricultural Workers, All Other	568	45-2099
Air Crew Members	873	55-3011
Air Crew Officers	862	55-1011
Air Traffic Controllers	813	53-2021
Air Transportation Workers, All Other	815	53-2099
Aircraft Cargo Handling Supervisors	808	53-1011
Aircraft Launch & Recovery Officers	863	55-1012
Aircraft Launch & Recovery Specialists	874	55-3012
Aircraft Mechanics & Service Technicians	654	49-3011
Aircraft Struct, Surfaces, Rigging, & Systems Assemb	696	51-2011
Airfield Operations Specialists	814	53-2022
Airline Pilots, Copilots, & Flight Engineers	811	53-2011
Ambulance Drivers & Attendants, Ex EMTs	816	53-3011
Amusement & Recreation Attendants	451	39-3091
Anesthesiologists	323	29-1061
Animal Breeders	562	45-2021
Animal Control Workers	402	33-9011
Animal Scientists	128	19-1011
Animal Trainers	444	39-2011
Announcers, All Other	295	27-3019
Anthropologists & Archeologists	158	19-3091
Anthropology & Archeology Teachers, Postsecond	216	25-1061
Appraisers & Assessors of Real Estate	57	13-2021
Arbitrators, Mediators, & Conciliators	195	23-1022
Architects, Except Landscape & Naval	90	17-1011
Architects, Surveyors, & Cartographers, All Other	94	17-1099
Architectural & Civil Drafters	113	17-3011
Architecture & Engineering Occupations	89	17-0000
Architecture Teachers, Postsecondary	207	25-1031
Archivists, Curators, & Museum Technicians	256	25-4011
Archivists, Curators, & Museum Techs, All Other	259	25-4019
Area, Ethnic, & Cultral Studies Teachrs, Postsecond	217	25-1062
Armored Assault Vehicle Crew Members	875	55-3013

## Alphabetical Index of Occupations

OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Armored Assault Vehicle Officers	864	55-1013
Art & Design Workers, All Other	282	27-1099
Art Directors	269	27-1011
Art, Drama, & Music Teachers, Postsecondary	231	25-1121
Artillery & Missile Crew Members	876	55-3014
Artillery & Missile Officers	865	55-1014
Artists & Related Workers, All Other	273	27-1019
Arts, Design, Entertainment, Sports, & Media Occs	268	27-0000
Assemblers & Fabricators, All Other	705	51-2099
Astronomers	141	19-2011
Athletes & Sports Competitors	285	27-2021
Athletic Trainers	366	29-9091
Atmos, Earth, Marine, & Space Sciences Teachrs	212	25-1051
Atmospheric & Space Scientists	143	19-2021
Audio & Video Equipment Technicians	305	27-4011
Audiologists	334	29-1121
Audio-Visual Collections Specialists	262	25-9011
Automotive Body & Related Repairers	655	49-3021
Automotive Glass Installers & Repairers	656	49-3022
Automotive Service Technicians & Mechanics	657	49-3023
Avionics Technicians	645	49-2091
Baggage Porters & Bellhops	464	39-6011
Bailiffs	395	33-3011
Bakers	706	51-3011
Barbers	458	39-5011
Bartenders	419	35-3011
Bicycle Repairers	665	49-3091
Bill & Account Collectors	505	43-3011
Billing & Posting Clerks & Machine Operators	506	43-3021
Bindery Workers	740	51-5011
Biochemists & Biophysicists	132	19-1021
Biological Science Teachers, Postsecondary	210	25-1042
Biological Scientists, All Other	135	19-1029
Biological Technicians	164	19-4021
Biomedical Engineers	97	17-2031
Bldng & Grounds Cleaning & Maint Wrkers, All Other	439	37-9099
Boilermakers	579	47-2011
Bookbinders	741	51-5012
Bookkeeping, Accounting, & Auditing Clerks	507	43-3031
Brickmasons & Blockmasons	580	47-2021
Bridge & Lock Tenders	836	53-6011
Broadcast News Analysts	296	27-3021
Broadcast Technicians	306	27-4012
Brokerage Clerks	512	43-4011
Budget Analysts	58	13-2031
Building & Grounds Cleaning & Maintenance Occs	428	37-0000
Building Cleaning Workers, All Other	433	37-2019
Bus & Truck Mechs & Diesel Engine Specialists	658	49-3031
Bus Drivers, School	818	53-3022
Bus Drivers, Transit & Intercity	817	53-3021

## Alphabetical Index of Occupations

OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Business & Financial Operations Occupations	38	13-0000
Business Operations Specialists, All Other	55	13-1199
Business Teachers, Postsecondary	204	25-1011
Butchers & Meat Cutters	707	51-3021
Cabinetmakers & Bench Carpenters	761	51-7011
Camera & Photographic Equipment Repairers	680	49-9061
Camera Ops, Television, Video, & Motion Picture	310	27-4031
Captains, Mates, & Pilots of Water Vessels	832	53-5021
Cardiovascular Technologists & Technicians	347	29-2031
Cargo & Freight Agents	530	43-5011
Carpenters	582	47-2031
Carpet Installers	583	47-2041
Cartographers & Photogrammetrists	92	17-1021
Cashiers	480	41-2011
Cement Masons & Concrete Finishers	587	47-2051
Cementing & Gluing Machine Operators & Tenders	798	51-9191
Chefs & Head Cooks	410	35-1011
Chemical Engineers	98	17-2041
Chemical Equipment Operators & Tenders	777	51-9011
Chemical Plant & System Operators	773	51-8091
Chemical Technicians	165	19-4031
Chemistry Teachers, Postsecondary	213	25-1052
Chemists	144	19-2031
Chief Executives	4	11-1011
Child Care Workers	470	39-9011
Child, Family, & School Social Workers	180	21-1021
Chiropractors	314	29-1011
Choreographers	289	27-2032
Civil Engineering Technicians	118	17-3022
Civil Engineers	99	17-2051
Claims Adjusters, Examiners, & Investigators	43	13-1031
Clean, Wash, & Metal Pickling Equip Ops & Tenders	799	51-9192
Cleaners of Vehicles & Equipment	849	53-7061
Clergy	188	21-2011
Clinical, Counseling, & School Psychologists	153	19-3031
Coaches & Scouts	286	27-2022
Coat, Paint, & Spray Mach Set, Opes & Tenders	792	51-9121
Coil Winders, Tapers, & Finishers	697	51-2021
Coin, Vend, & Amusement Mach Servicers & Repair	685	49-9091
Comb Food Prep & Serving Wrkers, Incl Fast Food	420	35-3021
Comm& & Control Center Officers	866	55-1015
Command & Control Center Specialists	877	55-3015
Commercial & Industrial Designers	274	27-1021
Commercial Divers	686	49-9092
Commercial Pilots	812	53-2012
Communications Equipment Operators, All Other	504	43-2099
Communications Teachers, Postsecondary	232	25-1122
Community & Social Service Specialists, All Other	187	21-1099
Community & Social Services Occupations	173	21-0000
Comp Officers, Ex Ag, Const, Hlth & Safety, & Trans	45	13-1041

## Alphabetical Index of Occupations

OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Comp-Controlled Mach Tool Ops, Metal & Plastic	714	51-4011
Compensation & Benefits Managers	14	11-3041
Compensation, Benefits, & Job Analysis Specialists	49	13-1072
Computer & Information Scientists, Research	72	15-1011
Computer & Information Systems Managers	12	11-3021
Computer & Mathematical Science Occupations	71	15-0000
Computer Hardware Engineers	100	17-2061
Computer Operators	546	43-9011
Computer Programmers	73	15-1021
Computer Science Teachers, Postsecondary	205	25-1021
Computer Software Engineers, Applications	74	15-1031
Computer Software Engineers, Systems Software	75	15-1032
Computer Specialists, All Other	81	15-1099
Computer Support Specialists	76	15-1041
Computer Systems Analysts	77	15-1051
Computer, Automated Teller, & Office Mach Repairer	642	49-2011
Concierges	465	39-6012
Conservation Scientists	136	19-1031
Construction & Building Inspectors	616	47-4011
Construction & Extraction Occupations	577	47-0000
Construction & Extraction Occupations, All Other	639	47-9999
Construction & Related Workers, All Other	624	47-4099
Construction Laborers	589	47-2061
Construction Managers	22	11-9021
Construction Trades & Related Workers, All Other	625	47-4999
Continuous Mining Machine Operators	631	47-5041
Control & Valve Installers & Repairers, Ex Mech	670	49-9012
Conveyor Operators & Tenders	842	53-7011
Cooks, All Other	417	35-2019
Cooks, Fast Food	412	35-2011
Cooks, Institution & Cafeteria	413	35-2012
Cooks, Private Household	414	35-2013
Cooks, Restaurant	415	35-2014
Cooks, Short Order	416	35-2015
Cooling & Freezing Equipment Operators & Tenders	800	51-9193
Correctional Officers & Jailers	396	33-3012
Correspondence Clerks	513	43-4021
Cost Estimators	46	13-1051
Costume Attendants	452	39-3092
Counselors, All Other	179	21-1019
Counselors, Social & Religious Workers, All Other	191	21-9099
Counter & Rental Clerks	482	41-2021
Counter Attends, Cafe, Food Concess, & Coffee Shop	421	35-3022
Couriers & Messengers	531	43-5021
Court Reporters	198	23-2091
Court, Municipal, & License Clerks	514	43-4031
Craft Artists	270	27-1012
Crane & Tower Operators	843	53-7021
Credit Analysts	59	13-2041
Credit Authorizers, Checkers, & Clerks	515	43-4041

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Criminal Justice & Law Enforce Teachrs, Postsecond	228	25-1111
Crossing Guards	406	33-9091
Crushing, Grinding, & Polishing Mach Setters, Ops	779	51-9021
Curators	257	25-4012
Customer Service Representatives	516	43-4051
Cutters & Trimmers, Hand	782	51-9031
Cutting & Slicing Mach Setters, Ops, & Tenders	783	51-9032
Cutting, Punching, & Press Machine Setters, Ops	719	51-4031
Dancers	288	27-2031
Data Entry Keyers	547	43-9021
Database Administrators	78	15-1061
Demonstrators & Product Promoters	492	41-9011
Dental Assistants	380	31-9091
Dental Hygienists	346	29-2021
Dental Laboratory Technicians	788	51-9081
Dentists, All Other Specialists	319	29-1029
Dentists, General	315	29-1021
Derrick Operators, Oil & Gas	626	47-5011
Designers, All Other	281	27-1029
Desktop Publishers	549	43-9031
Detectives & Criminal Investigators	397	33-3021
Diagnostic Medical Sonographers	348	29-2032
Dietetic Technicians	352	29-2051
Dietitians & Nutritionists	320	29-1031
Dining Rm & Cafeteria Attendants & Bartender Help	424	35-9011
Directors, Religious Activities & Education	189	21-2021
Dishwashers	425	35-9021
Dispatchers, Except Police, Fire, & Ambulance	533	43-5032
Drafters, All Other	116	17-3019
Drafters, Engineering, & Map Technicians, All Other	126	17-3099
Dredge Operators	844	53-7031
Drill & Bore Mach Tool Set, Ops, & Tend, Metal & Plasti	720	51-4032
Driver/Sales Workers	819	53-3031
Dr-to-Dr Sales Wrkrs, Nws & St Vndrs, & Rel Wrkrs	498	41-9091
Drywall & Ceiling Tile Installers	593	47-2081
Earth Drillers, Except Oil & Gas	629	47-5021
Economics Teachers, Postsecondary	218	25-1063
Economists	150	19-3011
Editors	300	27-3041
Educ Admins, Elementary & Secondary School	24	11-9032
Educ Admins, Preschool & Child Care Center	23	11-9031
Education Administrators, All Other	26	11-9039
Education Administrators, Postsecondary	25	11-9033
Education Teachers, Postsecondary	226	25-1081
Education, Training, & Library Occupations	203	25-0000
Education, Training, & Library Workers, All Other	266	25-9099
Educational, Vocational, & School Counselors	175	21-1012
Electric Motor, Power Tool, & Related Repairers	646	49-2092
Electrical & Electronic Engineering Technicians	119	17-3023
Electrical & Electronic Equipment Assemblers	698	51-2022

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Electrical & Electronic Equip Mechs, Install, & Repair	653	49-2099
Electrical & Electronics Drafters	114	17-3012
Electrical & Electronics Install & Repair, Trans Equipt	647	49-2093
Electrical & Electronics Repair, Comm & Indust Equipt	648	49-2094
Electrical & Electronics Repair, Powerhse, Substrn, & Re	649	49-2095
Electrical Engineers	101	17-2071
Electrical Power-Line Installers & Repairers	678	49-9051
Electricians	595	47-2111
Electromechanical Equipment Assemblers	699	51-2023
Electro-Mechanical Technicians	120	17-3024
Electronic Equipt Install & Repair, Motor Veh	650	49-2096
Electronic Home Entertainment Equipt Install & Repair	651	49-2097
Electronics Engineers, Except Computer	102	17-2072
Elementary School Teachers, Except Special Ed	244	25-2021
Elevator Installers & Repairers	617	47-4021
Eligibility Interviewers, Government Programs	517	43-4061
Embalmers	456	39-4011
Emergency Management Specialists	47	13-1061
Emergency Medical Technicians & Paramedics	351	29-2041
Employment, Recruitment, & Placement Specialists	48	13-1071
Engine & Other Machine Assemblers	700	51-2031
Engineering Managers	27	11-9041
Engineering Teachers, Postsecondary	208	25-1032
Engineering Technicians, Except Drafters, All Other	124	17-3029
Engineers, All Other	112	17-2199
English Lang & Literature Teachers, Postsecond	233	25-1123
Entertainers & Performers, Sports & Rel Workers	292	27-2099
Entertainment Attendants & Rel Workers, All Other	454	39-3099
Environ Science & Protection Techs, Incl Health	169	19-4091
Environmental Engineering Technicians	121	17-3025
Environmental Engineers	103	17-2081
Environmental Science Teachers, Postsecondary	214	25-1053
Environmental Scientists & Specialists, Incl Health	146	19-2041
Epidemiologists	138	19-1041
Etchers & Engravers	801	51-9194
Excavating & Loading Machine & Dragline Operators	845	53-7032
Executive Secretaries & Administrative Assistants	542	43-6011
Explosive Wrkers, Ordnce Handling Experts, & Blasters	630	47-5031
Extraction Workers, All Other	638	47-5099
Extrud & Draw Mach Setters, Ops, & Tends, Metl & Plas	716	51-4021
Extrude & Form Mach Setters, Ops, & Tenders	757	51-6091
Extrude, Form, Press, & Compact Mach Set, Ops, & Tend	784	51-9041
Fabric & Apparel Patternmakers	758	51-6092
Fabric Menders, Except Garment	687	49-9093
Fallers	572	45-4021
Family & General Practitioners	324	29-1062
Farm & Home Management Advisors	263	25-9021
Farm Equipment Mechanics	659	49-3041
Farm Labor Contractors	560	45-1012
Farm, Ranch, & Other Agricultural Managers	20	11-9011

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Farmers & Ranchers	21	11-9012
Farming, Fishing, & Forestry Occupations	558	45-0000
Farming, Fishing, & Forestry Workers, All Other	576	45-9099
Farmworkers, Agricultural Production	567	45-2094
Farmworkers, Farm & Ranch Animals	566	45-2093
Farmwrkrs & Labor, Crop, Nursery, & Greenhouse	565	45-2092
Fashion Designers	275	27-1022
Fence Erectors	618	47-4031
Fiberglass Laminators & Fabricators	702	51-2091
File Clerks	518	43-4071
Film & Video Editors	311	27-4032
Financial Analysts	60	13-2051
Financial Examiners	63	13-2061
Financial Managers	13	11-3031
Financial Specialists, All Other	68	13-2099
Financial, Information, & Record Clerks, All Other	529	43-4999
Fine Artists, Incl Painters, Sculptors, & Illustrators	271	27-1013
Fire Fighters	392	33-2011
Fire Inspectors & Investigators	393	33-2021
First-Line Supervisors/Managers of Air Crew Members	870	55-2011
First-Line Supervisors/Managers of All Other Tactical O	872	55-2013
First-Line Supervisors/Managers of Weapons Specialists	871	55-2012
First-Line Sups/Managers of Correctional Officers	388	33-1011
First-Line Sups/Managers of Police & Detectives	389	33-1012
First-Line Sups/Mgrs of Construction Trades	578	47-1011
First-Line Sups/Mgrs of Farm, Fish, & Forest Wrkrs	559	45-1011
First-Line Sups/Mgrs of Fire Fighting & Prevent Wrkrs	390	33-1021
First-Line Sups/Mgrs of Food Prep & Serving Wrkrs	411	35-1012
First-Line Sups/Mgrs of Help, Labor, & Mat Move, Hand	809	53-1021
First-Line Sups/Mgrs of Housekeep & Janitor Wrkrs	429	37-1011
First-Line Sups/Mgrs of Lndscp, Lwn Serv, & Grndskeep W	430	37-1012
First-Line Sups/Mgrs of Mechanics, Installer	641	49-1011
First-Line Sups/Mgrs of Non-Retail Sales Workers	479	41-1012
First-Line Sups/Mgrs of Office & Admin Support Wrkrs	501	43-1011
First-Line Sups/Mgrs of Personal Service Workers	443	39-1021
First-Line Sups/Mgrs of Prod & Operating Wrkrs	695	51-1011
First-Line Sups/Mgrs of Retail Sales Workers	478	41-1011
First-Line Sups/Mgrs of Trans & Mat-Moving Mach & Veh O	810	53-1031
First-Line Sups/Mgrs, Protective Serv Wrkrs, All Other	391	33-1099
Fish & Game Wardens	398	33-3031
Fishers & Related Fishing Workers	569	45-3011
Fitness Trainers & Aerobics Instructors	472	39-9031
Flight Attendants	468	39-6031
Floor Layers, Except Carpet, Wood, & Hard Tiles	584	47-2042
Floor Sanders & Finishers	585	47-2043
Floral Designers	276	27-1023
Food & Tobac Roast, Bake, & Dry Mach Ops & Tends	710	51-3091
Food Batchmakers	711	51-3092
Food Cooking Machine Operators & Tenders	712	51-3093
Food Prep & Serving Related Workers, All Other	427	35-9099

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Food Preparation & Serving Related Occupations	409	35-0000
Food Preparation Workers	418	35-2021
Food Processing Workers, All Other	713	51-3099
Food Scientists & Technologists	129	19-1012
Food Servers, Nonrestaurant	423	35-3041
Food Service Managers	28	11-9051
Foreign Language & Lit Teachrs, Postsecond	234	25-1124
Forensic Science Technicians	170	19-4092
Forest & Conservation Science Teachrs, Postsecond	211	25-1043
Forest & Conservation Technicians	171	19-4093
Forest & Conservation Workers	571	45-4011
Forest Fire Inspectors & Prevention Specialists	394	33-2022
Foresters	137	19-1032
Forging Mach Setters, Ops, & Tends, Metal & Plastic	717	51-4022
Foundry Mold & Coremakers	729	51-4071
Funeral Attendants	457	39-4021
Funeral Directors	29	11-9061
Furnace, Kiln, Oven, Drier, & Kettle Ops & Tenders	785	51-9051
Furniture Finishers	762	51-7021
Gaming & Sports Book Writers & Runners	447	39-3012
Gaming Cage Workers	508	43-3041
Gaming Change Persons & Booth Cashiers	481	41-2012
Gaming Dealers	446	39-3011
Gaming Managers	30	11-9071
Gaming Service Workers, All Other	448	39-3019
Gaming Supervisors	441	39-1011
Gaming Surveillance Officers & Gaming Investigators	404	33-9031
Gaming Workers, All Other	455	39-3199
Gas Compressor & Gas Pumping Station Operators	853	53-7071
Gas Plant Operators	774	51-8092
General & Operations Managers	5	11-1021
Geographers	159	19-3092
Geography Teachers, Postsecondary	219	25-1064
Geological & Petroleum Technicians	166	19-4041
Geoscientists, Except Hydrologists & Geographers	147	19-2042
Glaziers	596	47-2121
Graders & Sorters, Agricultural Products	563	45-2041
Graduate Teaching Assistants	237	25-1191
Graphic Designers	277	27-1024
Grind, Lap, Polish, & Buff Mach Tool Set, Ops, & Tend,	721	51-4033
Grinding & Polishing Workers, Hand	780	51-9022
Grounds Maintenance Workers, All Other	438	37-3019
Hairdressers, Hairstylists, & Cosmetologists	459	39-5012
Hazardous Materials Removal Workers	619	47-4041
Health & Safety Engrs, Ex Mining Safety Engrs & Insp	104	17-2111
Health Diagnosing & Treating Practitioners, All Other	343	29-1199
Health Educators	184	21-1091
Health Professionals & Technicians, All Other	368	29-9199
Health Specialties Teachers, Postsecondary	224	25-1071
Health Technologists & Technicians, All Other	362	29-2099

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Healthcare Practitioners & Tech Workers, All Other	367	29-9099
Healthcare Practitioners & Technical Occupations	313	29-0000
Healthcare Support Occupations	371	31-0000
Healthcare Support Workers, All Other	386	31-9099
Heat Treat Equipt Set, Ops, & Tend, Metal & Plastic	735	51-4191
Heating, Air Conditioning, & Refrigeration Mechanics	671	49-9021
Helpers, Construction Trades, All Other	615	47-3019
Helpers--Brick, Block, Stonemasons, & Tile & Marble Set	609	47-3011
Helpers--Carpenters	610	47-3012
Helpers--Electricians	611	47-3013
Helpers--Extraction Workers	637	47-5081
Helpers--Installation, Maint, & Repair Workers	692	49-9098
Helpers--Paint, Paperhanger, Plaster, & Stucco	612	47-3014
Helpers--Pipelayer, Plumber, Pipefitter, & Steamfitter	613	47-3015
Helpers--Production Workers	805	51-9198
Helpers--Roofers	614	47-3016
Highway Maintenance Workers	620	47-4051
Historians	160	19-3093
History Teachers, Postsecondary	235	25-1125
Hoist & Winch Operators	847	53-7041
Home Appliance Repairers	672	49-9031
Home Economics Teachers, Postsecondary	238	25-1192
Home Health Aides	372	31-1011
Hosts & Hostess, Restaurant, Lounge, & Coffee Shp	426	35-9031
Hotel, Motel, & Resort Desk Clerks	519	43-4081
Human Resources Assist, Ex Pay & Timekeep	525	43-4161
Human Resources Managers, All Other	16	11-3049
Human Resrces, Trng, & Lab Rels Specs, All Other	51	13-1079
Hunters & Trappers	570	45-3021
Hydrologists	148	19-2043
Industrial Engineering Technicians	122	17-3026
Industrial Engineers	105	17-2112
Industrial Machinery Mechanics	673	49-9041
Industrial Production Managers	17	11-3051
Industrial Truck & Tractor Operators	848	53-7051
Industrial-Organizational Psychologists	154	19-3032
Infantry	878	55-3016
Infantry Officers	867	55-1016
Information & Record Clerks, All Other	528	43-4199
Inspectors, Testers, Sorters, Samplers, & Weighers	786	51-9061
Installation, Maint, & Repair Workers, All Other	693	49-9099
Installation, Maintenance, & Repair Occupations	640	49-0000
Instructional Coordinators	264	25-9031
Insulation Workers, All Other	599	47-2139
Insulation Workers, Floor, Ceiling, & Wall	597	47-2131
Insulation Workers, Mechanical	598	47-2132
Insurance Appraisers, Auto Damage	44	13-1032
Insurance Claims & Policy Processing Clerks	550	43-9041
Insurance Sales Agents	486	41-3021
Insurance Underwriters	62	13-2053

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Interior Designers	278	27-1025
Internists, General	325	29-1063
Interpreters & Translators	303	27-3091
Interviewers, Except Eligibility & Loan	520	43-4111
Janitors & Clean, Ex Maids & Housekeep Cleaners	431	37-2011
Jewelers & Precious Stone & Metal Workers	787	51-9071
Job Printers	742	51-5021
Judges, Magistrate Judges, & Magistrates	196	23-1023
Kindergarten Teachers, Except Special Education	243	25-2012
Laborers & Freight, Stock, & Material Movers, Hand	850	53-7062
Landscape Architects	91	17-1012
Landscaping & Groundskeeping Workers	435	37-3011
Lathe & Turn Mach Tool Set, Ops, & Tend, Metl & Plas	722	51-4034
Laundry & Dry-Cleaning Workers	746	51-6011
Law Clerks	199	23-2092
Law Teachers, Postsecondary	229	25-1112
Lawyers	193	23-1011
Lay-Out Workers, Metal & Plastic	736	51-4192
Legal & Related Workers, All Other	202	23-9099
Legal Occupations	192	23-0000
Legal Secretaries	543	43-6012
Legal Support Workers, All Other	201	23-2099
Legislators	6	11-1031
Librarians	260	25-4021
Library Assistants, Clerical	521	43-4121
Library Science Teachers, Postsecondary	227	25-1082
Library Technicians	261	25-4031
Library, Museum, Training, & Oth Ed Wrkrs, All Other	267	25-9199
Licensed Practical & Licensed Vocational Nurses	358	29-2061
Life Scientists, All Other	140	19-1099
Life, Physical, & Social Science Occupations	127	19-0000
Life, Physical, & Social Science Techs, All Other	172	19-4099
Lifeguards, Ski Patrol, & Oth Rec Protect Serv Wrkrs	407	33-9092
Loading Machine Operators, Underground Mining	846	53-7033
Loan Counselors	64	13-2071
Loan Interviewers & Clerks	522	43-4131
Loan Officers	65	13-2072
Locker Room, Coatroom, & Dressing Room Attend	453	39-3093
Locksmiths & Safe Repairers	688	49-9094
Locomotive Engineers	824	53-4011
Locomotive Firers	825	53-4012
Lodging Managers	31	11-9081
Log Graders & Scalers	574	45-4023
Logging Equipment Operators	573	45-4022
Logging Workers, All Other	575	45-4029
Logisticians	52	13-1081
Machine Feeders & Offbearers	851	53-7063
Machinists	724	51-4041
Maids & Housekeeping Cleaners	432	37-2012
Mail Clerks & Mail Mach Ops, Ex Postal Service	551	43-9051

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Maintenance & Repair Workers, General	674	49-9042
Maintenance Workers, Machinery	675	49-9043
Makeup Artists, Theatrical & Performance	460	39-5091
Management Analysts	53	13-1111
Management Occupations	3	11-0000
Management, Bus. & Financial Occs, All Other	69	11-13-9999
Management, Business, & Financial Occupations	2	11-13-0000
Managers, All Other	37	11-9199
Manicurists & Pedicurists	461	39-5092
Manufactured Building & Mobile Home Installers	689	49-9095
Marine Engineers & Naval Architects	106	17-2121
Market Research Analysts	151	19-3021
Marketing Managers	8	11-2021
Marriage & Family Therapists	176	21-1013
Massage Therapists	379	31-9011
Material Moving Workers, All Other	859	53-7199
Materials Engineers	107	17-2131
Materials Scientists	145	19-2032
Mathematical Science Occupations, All Other	87	15-2099
Mathematical Science Teachers, Postsecondary	206	25-1022
Mathematical Technicians	86	15-2091
Mathematicians	83	15-2021
Meat, Poultry, & Fish Cutters & Trimmers	708	51-3022
Mechanical Door Repairers	669	49-9011
Mechanical Drafters	115	17-3013
Mechanical Engineering Technicians	123	17-3027
Mechanical Engineers	108	17-2141
Media & Communication Equip. Workers, All Other	312	27-4099
Media & Communication Workers, All Other	304	27-3099
Medical & Clinical Laboratory Technicians	345	29-2012
Medical & Clinical Laboratory Technologists	344	29-2011
Medical & Health Services Managers	32	11-9111
Medical & Public Health Social Workers	181	21-1022
Medical Appliance Technicians	789	51-9082
Medical Assistants	381	31-9092
Medical Equipment Preparers	382	31-9093
Medical Equipment Repairers	681	49-9062
Medical Records & Health Information Technicians	359	29-2071
Medical Scientists, Except Epidemiologists	139	19-1042
Medical Secretaries	544	43-6013
Medical Transcriptionists	383	31-9094
Meeting & Convention Planners	54	13-1121
Mental Health & Substance Abuse Social Workers	182	21-1023
Mental Health Counselors	177	21-1014
Merchandise Displayers & Window Trimmers	279	27-1026
Metal Workers & Plastic Workers, All Other	739	51-4199
Metal-Refining Furnace Operators & Tenders	725	51-4051
Meter Readers, Utilities	534	43-5041
Microbiologists	133	19-1022
Mid School Teachers, Ex Special & Vocational Ed	245	25-2022

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Military Enlisted Tactical Operations & Air/Weapons Spe	881	55-3019
Military Officer Special & Tactical Operations Leader	869	55-1019
Military Specific Occupations	861	55-0000
Mill & Plan Mach Set, Ops, & Tend, Metal & Plastic	723	51-4035
Millwrights	676	49-9044
Mine Cutting & Channeling Machine Operators	632	47-5042
Mining & Geological Engrs, Incl Mining Safety Engrs	109	17-2151
Mining Machine Operators, All Other	633	47-5049
Mix & Blend Mach Setters, Ops, & Tenders	781	51-9023
Mobile Heavy Equipt Mechanics, Except Engines	660	49-3042
Model Makers, Metal & Plastic	727	51-4061
Model Makers, Wood	763	51-7031
Models	493	41-9012
Mold, Core, & Cast Mach, Set, Ops & Tend, Metl & Plas	730	51-4072
Molders, Shapers, & Casters, Except Metal & Plastic	802	51-9195
Motion Picture Projectionists	449	39-3021
Motor Vehicle Operators, All Other	823	53-3099
Motorboat Mechanics	662	49-3051
Motorboat Operators	833	53-5022
Motorcycle Mechanics	663	49-3052
Mult MachTool Set, Ops, & Tend,Metal & Plastic	731	51-4081
Multi-Media Artists & Animators	272	27-1014
Museum Technicians & Conservators	258	25-4013
Music Directors & Composers	290	27-2041
Musical Instrument Repairers & Tuners	682	49-9063
Musicians & Singers	291	27-2042
Natural Sciences Managers	33	11-9121
Network & Computer Systems Administrators	79	15-1071
Network Systems & Data Communications Analysts	80	15-1081
New Accounts Clerks	523	43-4141
News Analysts, Reporters & Corres, All Other	298	27-3029
Nonfarm Animal Caretakers	445	39-2021
Nuclear Engineers	110	17-2161
Nuclear Medicine Technologists	349	29-2033
Nuclear Power Reactor Operators	768	51-8011
Nuclear Technicians	167	19-4051
Numerical Tool & Process Control Programmers	715	51-4012
Nursing Aides, Orderlies, & Attendants	373	31-1012
Nursing Instructors & Teachers, Postsecondary	225	25-1072
Obstetricians & Gynecologists	326	29-1064
Occupation Unknown	882	99-9999
Occupational Health & Safety Specialists	363	29-9011
Occupational Health & Safety Technicians	364	29-9012
Occupational Therapist Aides	376	31-2012
Occupational Therapist Assistants	375	31-2011
Occupational Therapists	335	29-1122
Occupl Hlth & Safety Specs & Techs, All Other	365	29-9019
Office & Administrative Support Occupations	500	43-0000
Office & Administrative Support Workers, All Other	556	43-9199
Office Clerks, General	552	43-9061

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Office Machine Operators, Except Computer	553	43-9071
Operating Engineers & Oth Const Equipment Ops	592	47-2073
Operations Research Analysts	84	15-2031
Ophthalmic Laboratory Technicians	790	51-9083
Opticians, Dispensing	360	29-2081
Optometrists	321	29-1041
Oral & Maxillofacial Surgeons	316	29-1022
Order Clerks	524	43-4151
Orthodontists	317	29-1023
Orthotists & Prosthetists	361	29-2091
Outdoor Power Equipt & Other Small Eng Mechanic	664	49-3053
Packaging & Filling Machine Operators & Tenders	791	51-9111
Packers & Packagers, Hand	852	53-7064
Painters, Construction & Maintenance	600	47-2141
Painters, Transportation Equipment	793	51-9122
Painting, Coating, & Decorating Workers	794	51-9123
Paper Goods Machine Setters, Ops, & Tenders	803	51-9196
Paperhanglers	601	47-2142
Paralegals & Legal Assistants	197	23-2011
Parking Enforcement Workers	399	33-3041
Parking Lot Attendants	837	53-6021
Parts Salespersons	483	41-2022
Patternmakers, Metal & Plastic	728	51-4062
Patternmakers, Wood	764	51-7032
Paving, Surfacing, & Tamping Equipment Operators	590	47-2071
Payroll & Timekeeping Clerks	509	43-3051
Pediatricians, General	327	29-1065
Personal & Home Care Aides	471	39-9021
Personal Care & Service Occupations	440	39-0000
Personal Care & Service Workers, All Other	475	39-9099
Personal Financial Advisors	61	13-2052
Pest Control Workers	434	37-2021
Pesticide Handlers, Spray, & Applicators, Vegetation	436	37-3012
Petrol Pump System Ops, Refinery Ops, & Gaugers	775	51-8093
Petroleum Engineers	111	17-2171
Pharmacists	322	29-1051
Pharmacy Aides	384	31-9095
Pharmacy Technicians	353	29-2052
Philosophy & Religion Teachers, Postsecondary	236	25-1126
Photographers	309	27-4021
Photographic Process Workers	795	51-9131
Photographic Processing Machine Operators	796	51-9132
Physical Scientists, All Other	149	19-2099
Physical Therapist Aides	378	31-2022
Physical Therapist Assistants	377	31-2021
Physical Therapists	336	29-1123
Physician Assistants	331	29-1071
Physicians & Surgeons, All Other	330	29-1069
Physicists	142	19-2012
Physics Teachers, Postsecondary	215	25-1054

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Pile-Driver Operators	591	47-2072
Pipelayers	602	47-2151
Plant & System Operators, All Other	776	51-8099
Plasterers & Stucco Masons	604	47-2161
Plate & Coat Mach Set, Ops, & Tend, Metal & Plastic	737	51-4193
Plumbers, Pipefitters, & Steamfitters	603	47-2152
Podiatrists	332	29-1081
Police & Sheriff's Patrol Officers	400	33-3051
Police, Fire, & Ambulance Dispatchers	532	43-5031
Political Science Teachers, Postsecondary	220	25-1065
Political Scientists	161	19-3094
Postal Serv Mail Sort, Processors, & Processing	537	43-5053
Postal Service Clerks	535	43-5051
Postal Service Mail Carriers	536	43-5052
Postmasters & Mail Superintendents	34	11-9131
Postsecondary Teachers, All Other	241	25-1199
Pourers & Casters, Metal	726	51-4052
Power Distributors & Dispatchers	769	51-8012
Power Plant Operators	770	51-8013
Precision Instrument & Equipmt Repairers, All Other	684	49-9069
Prepress Technicians & Workers	743	51-5022
Preschool Teachers, Except Special Education	242	25-2011
Pressers, Textile, Garment, & Related Materials	747	51-6021
Printing Machine Operators	744	51-5023
Printing Workers, All Other	745	51-5099
Private Detectives & Investigators	403	33-9021
Probation Offcrs & Correctional Treatment Specialis	185	21-1092
Procurement Clerks	510	43-3061
Producers & Directors	284	27-2012
Production Occupations	694	51-0000
Production Workers, All Other	806	51-9199
Production, Planning, & Expediting Clerks	538	43-5061
Professional & Related Occupations	70	15-29-0000
Professional & Related Occupations	88	15-29-0000
Professional & Related Occupations, All Other	369	15-29-9999
Proofreaders & Copy Markers	554	43-9081
Property, Real Estate, & Community Assn Mgrs	35	11-9141
Prosthodontists	318	29-1024
Protective Service Occupations	387	33-0000
Protective Service Workers, All Other	408	33-9099
Psychiatric Aides	374	31-1013
Psychiatric Technicians	354	29-2053
Psychiatrists	328	29-1066
Psychologists, All Other	155	19-3039
Psychology Teachers, Postsecondary	221	25-1066
Public Address System & Other Announcers	294	27-3012
Public Relations Managers	10	11-2031
Public Relations Specialists	299	27-3031
Pump Operators, Except Wellhead Pumpers	854	53-7072
Purch Agents, Ex Wholesale, Retail, & Farm Prods	42	13-1023

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Purchasing Agents & Buyers, Farm Products	40	13-1021
Purchasing Managers	18	11-3061
Radar & Sonar Technicians	879	55-3017
Radiation Therapists	337	29-1124
Radio & Television Announcers	293	27-3011
Radio Mechanics	643	49-2021
Radio Operators	307	27-4013
Radiologic Technologists & Technicians	350	29-2034
Rail Car Repairers	661	49-3043
Rail Transportation Workers, All Other	830	53-4099
Rail Yard Engineers, Dinkey Operators, & Hostlers	826	53-4013
Railroad Brake, Signal, & Switch Operators	827	53-4021
Railroad Conductors & Yardmasters	828	53-4031
Rail-Track Laying & Maintenance Equipment Ops	621	47-4061
Real Estate Brokers	494	41-9021
Real Estate Sales Agents	495	41-9022
Receptionists & Information Clerks	526	43-4171
Recreation & Fitness Studies Teachrs, Postsecond	239	25-1193
Recreation Workers	473	39-9032
Recreational Therapists	338	29-1125
Recreational Vehicle Service Technicians	666	49-3092
Refractory Materials Repairers, Ex Brickmasons	677	49-9045
Refuse & Recyclable Material Collectors	856	53-7081
Registered Nurses	333	29-1111
Rehabilitation Counselors	178	21-1015
Reinforcing Iron & Rebar Workers	605	47-2171
Religious Workers, All Other	190	21-2099
Reporters & Correspondents	297	27-3022
Reservation & Trans Ticket Agents & Travel Clerks	527	43-4181
Residential Advisors	474	39-9041
Respiratory Therapists	339	29-1126
Respiratory Therapy Technicians	355	29-2054
Retail Salespersons	484	41-2031
Riggers	690	49-9096
Rock Splitters, Quarry	634	47-5051
Rolling Mach Setters, Ops, & Tends, Metal & Plastic	718	51-4023
Roof Bolters, Mining	635	47-5061
Roofers	606	47-2181
Rotary Drill Operators, Oil & Gas	627	47-5012
Roustabouts, Oil & Gas	636	47-5071
Sailors & Marine Oilers	831	53-5011
Sales & Related Occupations	477	41-0000
Sales & Related Workers, All Other	499	41-9099
Sales Engineers	496	41-9031
Sales Managers	9	11-2022
Sales Representatives, Services, All Other	489	41-3099
Sales Reps, Whlesale & Mfg, Tech & Scientific Prods	490	41-4011
Sales Reps, Whlsale & Mfg, Ex Tech & Scientific Prods	491	41-4012
Sawing Mach Setters, Ops, & Tenders, Wood	765	51-7041
Secondary School Teachers, Ex Special & Voc Ed	247	25-2031

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Secretaries, Admin Assist, & Oth Off Suprt Wrkers, All O	557	43-9999
Secretaries, Except Legal, Medical, & Executive	545	43-6014
Securities, Commodities, & Financial Serv Sales Agts	487	41-3031
Security & Fire Alarm Systems Installers	652	49-2098
Security Guards	405	33-9032
Segmental Pavers	623	47-4091
Self-Enrichment Education Teachers	253	25-3021
Semiconductor Processors	797	51-9141
Separate, Filter, Clarify, Precipitate, & Still Mach Se	778	51-9012
Septic Tank Servicers & Sewer Pipe Cleaners	622	47-4071
Service Occupations	370	31-39-0000
Service Occupations, All Other	476	31-39-9999
Service Station Attendants	838	53-6031
Service Unit Operators, Oil, Gas, & Mining	628	47-5013
Set & Exhibit Designers	280	27-1027
Sewers, Hand	751	51-6051
Sewing Machine Operators	748	51-6031
Shampooers	462	39-5093
Sheet Metal Workers	607	47-2211
Ship Engineers	834	53-5031
Shipping, Receiving, & Traffic Clerks	539	43-5071
Shoe & Leather Workers & Repairers	749	51-6041
Shoe Machine Operators & Tenders	750	51-6042
Shuttle Car Operators	857	53-7111
Signal & Track Switch Repairers	691	49-9097
Skin Care Specialists	463	39-5094
Slaughterers & Meat Packers	709	51-3023
Slot Key Persons	442	39-1012
Social & Community Service Managers	36	11-9151
Social & Human Service Assistants	186	21-1093
Social Science Research Assistants	168	19-4061
Social Sciences Teachers, Postsecondary, All Other	223	25-1069
Social Scientists & Related Workers, All Other	162	19-3099
Social Work Teachers, Postsecondary	230	25-1113
Social Workers, All Other	183	21-1029
Sociologists	156	19-3041
Sociology Teachers, Postsecondary	222	25-1067
Soil & Plant Scientists	130	19-1013
Sound Engineering Technicians	308	27-4014
Special Ed Teachers, Preschool, Kindergarten, &	249	25-2041
Special Education Teachers, Middle School	250	25-2042
Special Education Teachers, Secondary School	251	25-2043
Special Forces	880	55-3018
Special Forces Officers	868	55-1017
Speech-Language Pathologists	340	29-1127
Stationary Engineers & Boiler Operators	771	51-8021
Statistical Assistants	555	43-9111
Statisticians	85	15-2041
Stock Clerks & Order Fillers	540	43-5081
Stonemasons	581	47-2022

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Structural Iron & Steel Workers	608	47-2221
Structural Metal Fabricators & Fitters	701	51-2041
Substance Abuse & Behavioral Disorder Counselors	174	21-1011
Subway & Streetcar Operators	829	53-4041
Surgeons	329	29-1067
Surgical Technologists	356	29-2055
Survey Researchers	152	19-3022
Surveying & Mapping Technicians	125	17-3031
Surveyors	93	17-1022
Switchboard Operators, Including Answering Service	502	43-2011
Tailors, Dressmakers, & Custom Sewers	752	51-6052
Tank Car, Truck, & Ship Loaders	858	53-7121
Tapers	594	47-2082
Tax Examiners, Collectors, & Revenue Agents	66	13-2081
Tax Preparers	67	13-2082
Taxi Drivers & Chauffeurs	822	53-3041
Teacher Assistants	265	25-9041
Teachers & Instructors, All Other	254	25-3099
Teachers, Primary, Secondary, & Adult, All Other	255	25-3999
Team Assemblers	703	51-2092
Technical Writers	301	27-3042
Telecomm Equipt Install & Repair, Ex Line Install	644	49-2022
Telecommunications Line Installers & Repairers	679	49-9052
Telemarketers	497	41-9041
Telephone Operators	503	43-2021
Tellers	511	43-3071
Terrazzo Workers & Finishers	588	47-2053
Textile Bleaching & Dyeing Mach Ops & Tenders	753	51-6061
Textile Cutting Machine Setters, Ops, & Tenders	754	51-6062
Textile Knit & Weave Mach Setters, Ops & Tenders	755	51-6063
Textile Wind, Twist, & Draw Out Mach Set, Ops & Tend	756	51-6064
Textile, Apparel, & Furnishings Workers, All Other	760	51-6099
Therapists, All Other	341	29-1129
Tile & Marble Setters	586	47-2044
Timing Device Assemblers, Adjusters, & Calibrators	704	51-2093
Tire Builders	804	51-9197
Tire Repairers & Changers	667	49-3093
Title Examiners, Abstractors, & Searchers	200	23-2093
Tool & Die Makers	732	51-4111
Tool Grinders, Filers, & Sharpeners	738	51-4194
Tour Guides & Escorts	466	39-6021
Traffic Technicians	839	53-6041
Training & Development Managers	15	11-3042
Training & Development Specialists	50	13-1073
Trans & Material Moving Occupations, All Other	860	53-9999
Trans Attendants, Ex Flight Attendants & Bag Porters	469	39-6032
Transit & Railroad Police	401	33-3052
Transportation & Material Moving Occupations	807	53-0000
Transportation Inspectors	840	53-6051
Transportation Workers, All Other	841	53-6099

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OCCUPATION	LINE NUMBER	CALIFORNIA SOC CODE
Transportation, Storage, & Distribution Managers	19	11-3071
Travel Agents	488	41-3041
Travel Guides	467	39-6022
Tree Trimmers & Pruners	437	37-3013
Truck Drivers, Heavy & Tractor-Trailer	820	53-3032
Truck Drivers, Light or Delivery Services	821	53-3033
Umpires, Referees, & Other Sports Officials	287	27-2023
Upholsterers	759	51-6093
Urban & Regional Planners	157	19-3051
Ushers, Lobby Attendants, & Ticket Takers	450	39-3031
Veh & Mobile Equipt Mechs, Install, & Repair, All Oth	668	49-3099
Veterinarians	342	29-1131
Veterinary Assistants & Lab Animal Caretakers	385	31-9096
Veterinary Technologists & Technicians	357	29-2056
Vocational Education Teachers, Middle School	246	25-2023
Vocational Education Teachers, Postsecondary	240	25-1194
Vocational Education Teachers, Secondary School	248	25-2032
Waiters & Waitresses	422	35-3031
Watch Repairers	683	49-9064
Water & Liquid Waste Treat Plant & System Ops	772	51-8031
Water Transportation Workers, All Other	835	53-5099
Weigh, Measure, Check, & Sample, Recordkeep	541	43-5111
Weld, Solder, & Braze Mach Setters, Ops, & Tenders	734	51-4122
Welders, Cutters, Solderers, & Brazers	733	51-4121
Wellhead Pumpers	855	53-7073
Wholesale & Retail Buyers, Except Farm Products	41	13-1022
Woodwork Mach Setters, Ops, & Tenders, Ex Sawing	766	51-7042
Woodworkers, All Other	767	51-7099
Word Processors & Typists	548	43-9022
Writers & Authors	302	27-3043
Zoologists & Wildlife Biologists	134	19-1023